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SENSUALISTIC: PHILOSOPHY

THE NINETEENTH CENTURY.

CONSIDERED

BY

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SENSUALISTIC PHILOSOPHY.

CHAPTER I.

THE ISSUE STATED.

NGLISHMEN and Americans frequently use the word "sensualist" to describe one in whom the animal appetites are predominant. We shall see that it is a just charge against the Sensualistic philosophy, that it not seldom inclines its advocates to this dominion of beastly lusts. But it is not from this fact that we draw the phrase by which we name it. The Sensualistic philosophy is that theory, which resolves all the powers of the human spirit into the functions of the five senses. and modifications thereof. It is the philosophy which finds all its rudiments in sensation. It not only denies to the spirit of man all innate ideas, but all innate powers of originating ideas, save those given us from our senses. It consequently attempts to account for every general and every abstract judgment, as an empirical result of our sensations, and consistently denies the validity of any à priori ideas. Such was the philosophy which was dominant in France at the close of the eighteenth century; and which, untaught by the frightful results it produced there, is now striving again to establish its dominion among us towards the close of the nineteenth age.

The great men who, in France, raised again the

standard of a truer philosophy, Maine de Biran, Royer Collard, and later, Victor Cousin, were called by contrast "spiritualists." Their characteristic doctrines were the distinct assertion of a separate, spiritual substance in man, soul, spirit, or mind, a simple monad in each person, immaterial, and contrasted with all material masses in its essential attributes: the relation of all organs of sensation as instruments to this intelligent spirit: its capacity of existing and acting after separation from the body; and the innate power of this substance to originate for itself, upon occasion of the particular ideas presented by sensations, valid abstract notions, valid primitive judgments of reason and conscience, and free desires and volitions. I should be perfectly willing to retain this name. And none, perhaps, could be found more appropriate, had not a coarse imposture, which has very recently become current, so usurped and defiled the word "spiritualism," as to endanger confusion of ideas; and had not some earlier writers perverted the term to express the false theory of the pure idealist. Let it then be understood, that the philosophy which I maintain against the Sensualistic, or exclusively empirical, and which has just been described, shall be called the Rational. It holds that the human intelligence is not a bundle of organs, but a pure spirit; it asserts for man a Reason, and not merely senses and their modifications.

In the eighteenth century, the Sensualistic philosophy appeared under many phases; it does so again in the nineteenth. But it always has its characteristic traits, and carries its own dangers to truth, virtue, and happiness. One attempt of this criticism of it will be to show that it always involves tendencies to erroneous logic, vitiating even the physical sciences, which it is wont to claim as its peculiar clients; to universal scepticism; to idealism; to nihilism; to the obliterating of moral distinctions, and the destruction of moral responsibility;

to materialism; to a denial of the supernatural; and thus, to atheism. Let us be understood: we do not charge that every Sensualistic philosopher holds to all these results, or approves them; we charge that they are all latent in the system, and that one or another of them is continually making itself patent in the outgrowth of this philosophy. Of this, one of the most instructive proofs is the historical; for there "the tree is known by its fruits." We shall, therefore, prepare the way for the stricter criticism, by a brief, but perspicuous review of the chief movements of Sensualism, especially in our own age.

The chief point which I aim to make, however, in this introduction, is my emphatic protest against the assumption, now so common among the Sensualistic school, that no metaphysic is valid. All who are tinctured with "Positivist" errors, continually exclaim, "No psychology; away with metaphysics! Only the phenomenal is true!" They wish to give no heed to the testimony of consciouness; they would ignore all subjective first truths, and confine true science to what sensations reveal, alone. They limit the light of "Experience," that safest of guides, to their experience of the objective. Now to this injustice we "give place by subjection; no, not for an hour." For, what is any science but a system of cognitions? But a system of cognitions must imply principles of cognition of some sort; and what are these but a metaphysic? These physical Positivists cheat themselves, in supposing that by ignoring separate spiritual substance with à priors laws, they can get rid of this truth. Let the something which knows be a spirit or a group of organs, one must have principles of cognition, all the same, in order to have systematized thought. Nothing can be more obvious than that the successful use of any implement implies some knowledge of its qualities and powers. And this is as true of the mind as of any other imple-

ment. It is simply impossible that one can construct any other branch of knowledge, without having some science of psychology and logic of his own. In other words, he must have accepted some laws of thought à priori, in order to construe his own thoughts. has not done it in words, he must have done it in fact. This is true of all common men. When the mechanic assumes, without present experiment, that a new steel blade will cut wood, has he not assumed two metaphysical truths: the presence of the same substance under the same properties, and the validity of his own memory concerning past experiments? When the gourmand argues, "I may not eat minced pies to-night for my supper, because they gave me frightful dreams last night," has he not posited a logical law of the reason? Every man is a virtual psychologist and logician (unless he is idiotic); he cannot trust his own mind, except as he believes in some powers and properties of his mind; these beliefs constitute, for him, his metaphysic. Even the Positivist, of course, has his psychology, although he repudiates it in words. And this is the Sensualistic psychology. No writers, of any school. go farther than the leaders of the Sensualistic philosophy, in speculations which have every trait which is expressed by the word "metaphysical" when used by the people in an evil sense. Nowhere on earth can writings be found more psychological, (that is, fuller of a false psychology,) more abstruse, more subtle, more obscure or more illogical and unpractical, than those of the most recent leaders of this school. All these philosophers love to applaud the inductive laws of Lord Bacon, and to contrast them with the unprofitableness of metaphysics. But Bacon does not undertake to establish physical laws; he proposes to settle those principles for reasoning from facts of experience, by which any and every physical law are to be established. In a word, it is metaphysics; only, it is true meta-

physics. So, nothing is easier for the perspicuous reader, than to take any treatise of any votary of the Sensualistic philosophy, and point to instances upon every page, where he makes a virtual appeal to some principle of metaphysics. Says this writer, concerning some theory of accounting for a group of phenomena: "This is not valid, because it is only hypothesis." what, I pray, is the dividing line between hypothesis and demonstrative induction? And why is the former, without the latter, invalid? The answer is, metaphysics. "The post hoc does not necessarily prove the propter hoc." Tell us, why? It cannot be told, without talking metaphysics. "Nothing," says the Positivist, "is demonstrable except what is experienced in sensa tions." There is, then, one à priori principle, at least, of the human intelligence; this namely, that the intuition of sense-perception is valid, if all other intuitive judgments are baseless. For it is only by assuming the validity of that intuitive judgment at the outset, that the Positivist ever learned anything valid by senseperception.

But above all do we insist, that the facts given by our subjective consciousness shall be admitted into the rank of experimental evidences. They shall be granted to be even more empirical, when observed with due care, than any objective empirical knowledge. The Sensualistic philosophers will be compelled to look them in the face, and to admit their force. For first, in claiming this, we are really pursuing the very process which they profess to approve. We observe and compare the experienced facts of consciousness, and make inductions from them. And second, we show that it is only by recognizing the validity of the facts of consciousness, that any one can receive the testimony of sensation. If I do not know certainly, that there is a conscious, intelligent self, who sees with the eyes, still less can I know that the thing seen by that self has any reality. If I am not

certain beforehand, that the self who saw the landscape last year is the self who recollects it now, still less have I any assurance that memory is not playing me false, in seeming to reproduce the same conception formerly perceived by my eyes.

CHAPTER II.

REVIEW OF THE SENSUALISTIC PHILOSOPHY OF THE PREVIOUS CENTURY.—HOBBES, LOCKE, CONDILLAC, HELVETIUS, ST. LAMBERT.

§ 1. TO the curious mind it will appear remarkable, and to the devout, perhaps, providential, that the first modern expounder of the Sensualistic philosophy should have carried it most fully to its legitimate results. Thomas Hobbes, of Malmesbury (A. D. 1588 to 1679), taught it with a boldness, ability. and unblenching consistency, which make his speculations invaluable to us: he shows us just what its corollaries are, when carried out with a rigid logic, from those first premises which are common to all the school. We may, then, ascribe to this intellectual giant the "bad eminence" of having anticipated all the fruit, which history has subsequently shown, by the speculations of his followers, and by the calamities these speculations have procured for their people, the system is fitted to bear. He enables us to see the whole development of Sensualism epitomized in one man.

Philosophy, according to Hobbes, has for its object all bodies which are formed and possess qualities. Physics, then, constitute the whole of true philosophy. As God is not conceived of as a body, or as having been formed; to philosophy neither His existence nor attributes are cognizable. Complaisance to the Christian prejudices of the day led Hobbes, instead of simply denying His existence, to remit its discussion to the

separate sphere of theology: philosophy has no more to do with the idea of a God. So, Christian usages make us talk of our souls as spirits; but it is impossible to have any evidence of an immaterial substance; for the only evidence is that of conception, which, in turn, comes only from sensation. The only definition of a soul, then, which philosophy can admit, is "a natural body of such subtility that it does not act upon the senses, but which fills a place, as would the image of a visible body, and has figure (without color) and dimension." Our souls have two faculties, conception and movement. Sensation is nothing else than a movement of certain parts, which exist in the interior of the sentient being, and these parts are those of the organs by which we feel. Sensations are the principle of knowledge, and all knowledge is derived from them. Thus, memory consists in our having a sensation that we have had a sensation. Imagination is a sensation which continues with feebler force, after its cause has ceased to act, like the wavelets which roughen the surface of a pool for a number of moments after the stone has fallen upon it. All the acts of generalizing, naming our ideas. comparing, and reasoning, are but associations of these sense-perceptions.

Let us now see how Hobbes generates the emotional and voluntary powers of the soul, which he denominates its faculty of movement. Says he: Conceptions and imaginations (decaying sensations) are only certain movements excited in a substance within the head. This movement is propagated also to the heart, and either concurs with or retards the vital movement there. This concurrence we call "pleasure," "content," "well-being;" this retardation we call "pain," "evil." The objects which produce the concurrence we describe as pleasant; those which produce the retardation we term odious. Love and hatred are only these feelings of concurrence or retardation again, relatively to

their objects. Farther: this concurrence which we call "pleasure" draws toward its object, and this retardation which we call "pain" repels us from its obiect. The one of these feelings is "desire," and the other is "aversion," or, relatively to the anticipation of pain from such an object, "fear." Thus we have the genesis of motives in the soul: and all is still but modified sensation. It is not difficult to see how the philosopher will, on this plan, account for volitions. every case of sudden or prompt volition, there is one desire present (desire being but sensation of pleasure modified), and volition is nothing but this desire unchecked, culminating into determination. If, however, another object cause pain in the mind, the first desire will be counterpoised by the fear. To this first pair of feelings may succeed still another desire, and another fear; and a third or fourth pair of feelings, between which the mind oscillates backwards and forwards. This oscillation is what we call "deliberation." As long as it subsists, no determination takes place, of course. The last desire, or fear, at this series of oscillations, happening to be the most vivid of the series. becomes volition! Hear his own words: (Human Nature, Ch. 12, § 6.) "As to will is desire, and to will not to act is fear, the cause of the desire or the fear is also the cause of our will." And again: "When deliberation takes place, its last act if it is a desire, is volition, and if it is repugnance, it is negative volition; so that volition and desire are one and the same thing considered under different aspects." "The liberty of willing and not willing is no greater in man than in other animals. Indeed, in one who feels desire, the cause of the desire precedes, in such sort that the desire cannot but follow: that is to say, it follows necessarily." It is too plain, from these citations, that with Hobbes there is no true liberty of the human spirit; and, indeed, he confesses himself a fatalist. In this he is thoroughly con-

sistent. In his view, man's liberty is merely the privilege to execute with the bodily members the volition which is necessitated by the objective cause. Of true liberty, that is, a power of choice, he thinks the mind The distinction between the outward inducement and the subjective desire, and that between the passive sensibilities and the conative emotions of the soul, are totally neglected. The object causes desire: and the desire not counterpoised is volition! Hence the human spirit is the passive victim of any objective impression ordained for it by fate or a mechanical necessity. If chance or Satan, or a human seducer, presents a purse of gold, with privacy and opportunity, to a man susceptible of cupidity, the volition to steal it is as purely an effect of physical necessity, as pain is of the blow of a bludgeon which breaks his head. And the man is precisely as irresponsible for the volition as he is for the pain.

The thoughtful hearer can divine hence, in advance of Hobbes' statements, what his scheme of ethics will be. We may find it set forth with perfect perspicuity and boldness, in a few sentences: "Every man calls that good which is agreeable to himself, and that evil which displeases him. Thus, since each man differs from others by his temperament or his mode of being, he differs from them in his distinction between the good and the evil; and there exists no goodness absolutely considered without relation; for the goodness which we attribute to God, even, is only His goodness relatively to us. As we call the things which please or displease us good or evil, we call the properties by which these things produce these effects, goodness or wickedness."

"Appetite, or desire, being the commencement of the animal movement which carries us towards something which pleases us, the final cause of that movement is to attain the end, which we thus call the design: and when we attain that end, the pleasure which it causes in us is named enjoyment. Thus good, and designed end, are the same thing regarded differently."

We are thus consistently taught from Sensualistic premises, that there is no uniform standard of moral right: that there is, indeed, no moral good save animal enjoyment-for all desires are "animal movements"and that there is no moral motive except selfishness. Conscience is as thoroughly obliterated by this scheme as the existence of the fairies.

Let us now see what theory of political society is deduced by Hobbes from his metaphysics, in his treatises of the Citizen, and "Leviathan." We must remember that, according to him, there is no supreme uniform standard of moral obligation, and no conscience The only motive of rational conduct is selfin man. interest. Hence, Hobbes naturally infers that the original conception of right which the human being has, is of a natural right to appropriate whatever he sees will contribute to his pleasure, and to avoid whatever produces pain. By the same reason one man feels this right, every other feels the same. The natural state, then, is one in which each man tends to claim all things, and to resist the similar claims of all others. But by the same natural right, each man is also resisted. Hence, the state of nature is "a war of all against all." But self-interest cannot become enlightened by experience, without perceiving that this war of all against all tends, on the whole, to the reduction of natural enjoyments to a minimum, and to the universal destruction of persons. Hence, the first acquired desire of nature is for repose from this endless strife of warring wills. How shall that repose be sought? Obviously, only in some force strong enough to suppress the strife; for there is no moral principle in man which can become a regulative standard. The competing wills of individuals being all naturally equal, and all properly exorbitant,

there is no reasonable umpire between them but the strong hand. Might makes right. He who is able to overpower the assailant of his natural good, in the competition, if he chooses not to destroy him, has thereby a perfect property in the spared enemy. Slavery and violent conquest are legitimate; and in this way was actually originated the controlling force which calmed the universal warfare into political society. When a conqueror had compelled a sufficient number of subjugated persons to work and fight for him, to show himself practically superior to all others, he was recognized as the suitable ruler, by all the others whose self-interest taught them to desire repose. Hence in order to secure the peaceable enjoyment of some naturaligood, they submitted their claims to the remainder to the powerful man, and became willingly a part of his subjugated train.

The essence of political power, then, is force; and in order to gain the end of government, repose, it must be an irresistible force. Government, then, should be absolutely despotic. And it is much more consistent that it should be an absolute monarchy in the hands of one man. The ruler is absolute proprietor of the persons and property of all the citizens; he is wholly irresponsible to them, as to all earthly authority. For, in passing from the state of nature into the political state, each person surrendered his individual independence absolutely to the Ruler, and a surrender of this kind is final and beyond recall. For, by this act, right of resistance is for the people annihilated; and they have reduced themselves, as holders of such a franchise, to non-existence. The entrance of the integer into political society is, as to his separate rights, final suicide. The Ruler is master, and the citizens are property: property has no appeal against its own proprietor. Any right of conscience against the Ruler's fat is, of course, out of the question: for Hobbes

does not believe in any conscience that can have rights.

I have begun by detailing briefly the creed of this old Sensualistic philosopher, because his ability and boldness have carried it to its true results. It will be found that he has anticipated by two hundred years, the Sensualistic theories of our own day. The affinity between them is significantly shown by their zeal in republishing his almost-forgotten works, and in vaunting his wisdom. Some of them may shrink from his extreme conclusions; but we are left to suppose that this moderation is rather the result of prudence than of disapprobation.

The purpose at this time is not so much to refute, as to show the real contents of this scheme of metaphysics. In consistency, it must include a denial of spirit, of God, of all à priori judgments, of the reason and abstract ideas, of all moral distinctions, of free agency, and of civil liberty. It leaves man, in reality, only sense-perceptions, appetites, and associations thereof, presenting them in apparent modifications of memory and experience. The sole plausibility of Hobbes' description of human nature arises from one artifice, that he has availed himself tacitly of the great fact of man's depravity, to construct a sort of saturnine travesty of his practical principles and actions. It is true, that a multitude of men are selfish; that they habitually disregard moral distinctions; that they seem slaves to animal appetites, and incompetent to aspire to any other than animal good; that they are best restrained by self-interest and fear. Hobbes' philosophy has no place for the doctrine of sin and of conscience. Hence, it is plausible for him to make this partial induction, and to ignore the great constitutional principles of reason and conscience in the human soul, which, in a true analysis of human nature, must always hold the prime place, and which, in fact. utter everywhere a constant, though often an unheeded.

protest against men's animality and selfishness. In a word, it is simply man's sin which gives a color of plausibility to Hobbes' analysis. How false that analysis is, appears in this: that sin is the disease and blemish of that nature which he pretends to describe. He has given us a spiritual physiology founded exclusively upon the dissection of specimens tainted with moral disease.

We have seen how Hobbes resolves volition into an effect caused by a physical necessity. Free-agency, there is none in his scheme. But how can that creature be entitled to civil liberty for whom spiritual frecdom is impossible? After denying the very existence of the moral faculty, which defines rights and regulates personal freedom. Hobbes can do nothing less than deny liberty to man in society. Again, if man's only faculty of cognition is sense-perception, and he has absolutely no ideas save those given from the bodies which he smells, or tastes, or feels, or hears, or sees, it is very clear that there can be no abstract idea, à priori, of space, of time, of power, of the infinite, of the moral right, of spirit, or of God. For none of these are properties of bodies; none of them are cognizable by the senses. It is true that Hobbes speaks often of God, of revelation, of revealed religion, and of a future existence. But all this is either an inconsistency or a mere blind to shield himself from the inconveniences of an atheistic reputation. For he again and again asserts postulates which would make natural theology impossible. He expressly ascribes the belief in God to man's ignorance, to his inability to account for second causes, to his fears and to his superstition. To recognize a first cause, or an omnipotent cause, is not to believe in a God; for atheists do both. It is only when we believe in a first cause, who is not only original and irresistible, but an intelligent, moral Person, ruling the world in righteousness, that we have a God. He whose philosophy knows nothing but organisms, mental functions which result

from organism, and sensations and their modifications; who does not recognize in himself spirit with original powers, conscience, and liberty; he cannot learn the existence of a personal God. For as He is confessedly not visible nor tangible, His existence must be known inferentially from His works. The only works of nature we can know are those around us and within us. It is only from those within us, that we can know spirit, intelligence, liberty, and holiness. "Nullus in microcosmo spiritus, nullus in macrocosmo Deus."

§ 2. The pious and amiable Locke, who wrote from A.D. 1674-1704, doubtless set out with purposes far more virtuous and reverent than Hobbes and his followers. And had he lived to the end of the eighteenth century, to behold the fruits of his own speculations in the famous "Essay upon the Hum n Understanding," he would doubtless have condemned them as strongly as we do. The reader is probably familiar with the account which he gives of the cause of his undertaking. Perceiving from a philosophic discussion which he witnessed, how much uncertainty arose among the disputants, from different apprehensions of the mind's processes, he concluded that a clear ascertainment of the powers of the understanding should be the preliminary of all other science. The problem which he proposed to himself was to discover the origin of our ideas. Here was the first and the fatal vice of Locke's method, that he began with a hypothesis as to the origin of the cognitions of which he found the mind possessed, instead of beginning by a faithful inspection of the traits of the mind's operations. The question of origin, which he made first, should thus have been the last, being reached at the final induction from the facts of consciousness. He would have been more than human if, having commenced by a hypothesis as to the source of our ideas, he had not been unconsciously swayed by that hypothesis, when he proceeded to the analysis of

the ideas themselves, which must be the only means of acquainting ourselves accurately with them. He should then have begun by the analysis, and inferred the origin of our ideas from their qualities.

Locke, having proposed first to ascertain the origin of our ideas, begins by an absolute denial of all innate ideas and principles in the soul. If we can understand his reasoning (Book I., Ch. 1.), it appears to be simply this: That if we find the mind furnished with natural faculties for acquiring its ideas, it is unreasonable to suppose that nature has given us any innate ones. But the former is obviously true. And anyone who will consult his common sense impartially, will convince himself that the only ideas he has, are those acquired by experience in the use of those faculties. We are bound, then, to conclude, that previous to experience of sensations, the mind is a blank, a tabula rasa, a surface susceptible of impressions, but absolutely without any characters inscribed upon it. And this conclusion is pushed so unsparingly, as to deny not only innate ideas, but innate principles of cognition.

This famous demonstration contains two glaring faults. The pious author is misled by a material illustration suggesting a false analogy. The mind is not a tablet, written or unwritten by nature; it is an intelligent agent. It is not a surface, but a spiritual monad. And second, Locke heedlessly confounds the occasion of the genesis of ideas with the cause. It may be perfectly true, that the intelligence exerts none of that cognitive power of which its nature makes it capable. and discloses none of those ruling norms of thought, or feeling, or will, which are originally constitutive of it. until it is stimulated by sensation. But from this, it by no means follows that sensation bestows those capacities and laws. To state this confusion of reasoning is sufficient to expose it. The question, whence the forms of thought and the ideas which seem to be original, must be decided

by wholly another process than Locke's; by faithful analysis, not by a mere concurrence of experiences. To say, for instance, that the mind thinks of empty space when it has sense-perception of a body extended, is far short of proving that the abstract idea comes from the sensation. It may be, that it comes from the mind itself upon occasion of the sensation. And that, I repeat. is to be proved or disproved by something else than mere synchronism.

Locke defines idea as anything which is before the mind when it thinks. He traces the whole operations of the mind to two sources, experience and reflection. Experience means, with him, our objective experiences through the senses. And the mind's reflective processes. contain nothing except what was first derived from sensation. Reflection is our internal experience. The ideas which it gives us are those of the operations of our spirits upon the objective experiences. Here we have the whole account of the processes of our soul. Fortunately for Locke's credit, the vagueness of his own apprehension of the reflective processes saved him from a part of the consequences of the Sensualistic philosophy. Under the mist of this description of reflection, giving the mind, in addition to sense-perceptions, ideas of its own operations thereupon, the amiable author was enabled to assume, from time to time, the exercise of the à priori powers of mind which he elsewhere so absolutely denies. But there remains his fatal dogma, that there is nothing in the mind save what first came from the senses. And his interpreters of a later day have taken care to clear away all uncertainty, by the sharpness of their exclusions, leaving us nothing but sensations and their modifications.

Locke, having denied everything innate, attempts to give us a Sensualistic origin for some of the ideas which have been most confidently believed to be connatural, such as our ideas of space, duration, identity of self,

infinitude, and axiomatic, or self-evident truths. His method throughout has the same fundamental error of mistaking the occasion of a mental change for the When do we have the idea of empty space? he Only when we see or feel two bodies separated asks. in space, or a body occupying space by its extension. Does not this show that the abstract idea of space is an empirical one, as truly as the idea of color or figure? How is the idea of duration generated? Locke answers, that we get it from the empirical note of the succession in our own ideas. One idea follows another; hence we derive the idea of succession, and succession is duration to us; the only notion of duration which we really have. For, he argues: only let the succession of ideas stop, and our perception of duration is gone. Let a man sleep soundly; the time seems to him but a moment, whether it be an hour, a night, or a year. all flux of ideas should be arrested by virtue of the exclusive prominency and persistency of one idea before the mind—as sometimes happens in profound reverie we should take no note of time. So, his followers add. a/period of time which is filled up with a succession of numerous and vivid ideas, seems to the mind a long duration: as when a country-youth first sees the many novelties of the city.

So, our conscious identity is, according to this system, but an empirical idea, deduced from the observed sequence of two states in consciousness. As the second state follows the first, reflection refers it to the same subject; and thus is generated the notion of our own identity. So, likewise, our idea of the infinite is confounded with that of the indefinite. According to Locke, infinitude is an idea purely negative, implying only the absence of definite limit. Hence, when we endeavor to construe it, we find ourselves resorting to the aid of number, in order to avoid falling into a complete confusion of mind; and we think of infinite space,

as millions of leagues added to millions; or of infinite time, as millions of years added to millions.

For such a system as Locke's, there are no necessary truths, nor primitive judgments. These are the objects of his ridicule. Such of them as he does not denounce as meaningless verbal forms, he derives from experience. It is true, that in his instances of necessary truths, he takes good care to cite only such as can be most easily made to appear empty; while he avoids all allusion to the more evident and important ones. What man, he exclaims, was ever helped to the ascertainment of anything which he did not know before, by such maxims as these? "That which is, is." "Nothing can be and not be at the same time." Of such primary judgments as these: "No effect without a cause," or, "no means without an intended end." he says nothing. Those axioms which are not empty truisms, he supposes to be learned by experience. For the child does not even understand their enunciation, much less believe them as necessary truths, until he has learned their truth in experimental instances.

Locke, like the other leading Sensualistic philosophers, is a thorough Nominalist. In this he is obviously consistent. For if there is nothing in reflection, save the ideas derived from sensation, since our sense-perceptions are only of individual objects, there is nothing to which general terms can answer. They are names, and nothing more. General concepts are mere chimeras of the reason. Here we may mention the famous definition of truth in our ideas, which, in the hands of Berkeley and Hume, led to results so astounding. "Truth in ideas," said Locke, "consists in their conformity to their objects." A moment's reflection will convince you, that by this description we get no truth in any idea of the objective world whatever. For clearly, my idea of matter is not like matter; my subjective idea of a color is not like a color; my idea of

solidity is not itself solid; my idea of extension is not actually extended. Hence, Hume readily deduced his whole frightful conclusion of scepticism, and Berkeley his system of pure idealism. But what else could Locke give us as a definition, bound as he was in the trammels of his wretched sensualism? He could not say, that the correctness of our ideas is determined by their rise according to the à priori laws of the intelligence; for he had begun by flouting all such laws. With him, the intelligence has no innate laws; it is a tabula rasa; its one original property is susceptibility of impressions.

Locke's views concerning the evidence of God's existence are characterized by two traits: an utter repudiation of the à priori method of Des Cartes, and an exclusive reliance on the à posteriori and teleological method. To the latter, there can, indeed, be no objection; and its value cannot be exaggerated. But this is upon two conditions: 1. Provided the primitive and necessary judgment be granted, "no effect without adequate cause," the argument from the existing universe is solid. But this principle Locke nowhere asserts; he passes it by in silence. In his philosophy there is no room for it; for he denies all necessary first truths, and recognizes none but those derived from experience. 2. This à posteriori argument, if it stand alone, will only prove that God is a cause sufficient to account for the effect. He is powerful, indeed, for the effects are grand; He is intelligent, for the effects are full of skill: He is truly an Artifex mundi, a world-maker, a grand mechanic. Perhaps, also, since the effects are limited, confused, and imperfect as far as known to man, may the First Cause be limited and imperfect? To this question the philosophy of Locke gives no answer. For it has no place for the necessary truths of the reason, that the contingent must imply the uncaused, the finite must imply the in finite, and the imperfect must imply the perfect. Let us admit these intuitions of the reason and conscience:

and we have, indeed, what St. Paul would show us in his natural theology, a Being of "eternal power and godhead." But in the Sensualistic philosophy, these necessary truths are ignored. Again, we have seen that until we find a God infinite in being, duration, and holiness, we have no true object of rational worship, but only a Demiurgus. But, says Locke, our only idea of the infinite is a negation! He knows no other conception of infinitude than the indefinite. Hence, the Divine Being, in becoming a suitable object of worship, must become a negation, an unknowable entity. Here we have the conclusion, which re-appears in the Sensualistic philosophy, from Hobbes to Herbert Spencer.

In Book IV., Ch. iii., Sec. 6, Locke carries the Sensualistic philosophy to another of its results; the denial. or, at least, the doubt of the spirituality of man's soul. We cannot know, he asserts, without revelation, by the contemplation of our own ideas, whether that which thinks in us is incorporeal or not. For, so far as our own reflective acts inform us, it may be possible that a certain mass of material particles aggregated in a given way, may become capable both of thought and feeling. Now, I assert, that if this be so, it will be most philosophic to believe that the something which thinks in us is an organism of material particles. For why postulate more than is requisite to account for all effects? Again, if the something which thinks is an organized body, then every instance of the destiny of organized things known in our experience would incline us. by analogy, to think that our souls will perish; for do we not see all other organisms perish? Nor can we be very sure that revelation designs to teach us the true immateriality of our souls; if our own consciousness does not forbid our ascribing all spiritual functions to some species of matter. For when the Bible tells us that our souls are spiritus, πνεύμο, קרָך, what guarantee have we that it may not design we shall understand

that this refined substance within us which thinks, is still as material as the atmosphere which our lungs exhale? Thus, the Sensualistic philosophy betrays us again to the materialists. When we shall prove, what we now assert, that our rational consciousness does absolutely forbid us to ascribe spiritual functions to any form of matter, the importance of the doctrine will be obvious to every religious reader.

It only remains for us to notice Locke's moral theory. We anticipate at once a doctrine unworthy of this department of our souls' operations, from the exceeding brevity of the space which the author devotes to the subject. And a moment's thought prepares us to find that a Sensualistic philosophy cannot admit a correct theory of morals. Virtue and vice are not sensible qualities; we do not discriminate them by touch, smell, the palate, the eyes, or the ears. The experience we derive through our senses cannot lead to the generation of the distinction, because the knowledge of it must pre-exist, in order to our judging the actions we witness, as to their moral quality. But the experience of sense-impressions can tell us that some actions are followed by pleasure, and others by pain. Our selfinterest in that which is pleasant or painful: there you have the production, and the only production of the reflective process acting upon our sensible experiences. There is all the basis, which these philosophers have, on which to construct a theory of morals. One can scarcely see a more impressive proof of the wretchedly vicious nature of their principles, than when he finds the amiable and devout Locke impelled by their rigor to identify natural and moral good, and to resolve the moral motive into self-interest. General good and evil are again and again defined by him as those things which are suited to produce in us pleasure or pain. Hear him proceed, Book II., Ch. xxvii., Sec. 5: "Good and evil, morally considered, are nothing else than the

conformity or opposition which is found between our actions and a certain law; a conformity and opposition which attracts us to the good and deters us from the evil, by the will and power of the lawgiver. And this good and this evil are nothing else than the pleasure and the pain which, by the determination of the lawgiver, accompany the observance or the violation of the law. And this is what we call reward and punishment."

Virtue, then, is obedience to a law. And the motive of that obedience is self-interest, stimulated by a fear of penalty and a hope of advantage. By this analysis, a real morality disappears as completely as in the alembick of Hobbes. The only difference which appears between the will of the lawgiver and the will of the transgressor is this: that the lawgiver is able to impose his penalty on the sinner. It will be impossible on this ground to prove that it is wrong to obey a law enjoining wicked actions, provided the wicked lawgiver is able to enforce a sufficient penalty. For the moment Locke resorts to any other element to discriminate between the just and the unjust law, he surrenders his principle: the à priori distinction between things right and wrong in themselves, not in their pleasant or unpleasant consequences only, unavoidably comes in. Or will those who think with Locke say, that the law which obligates is only the divine law, and such human laws as coincide therewith? This is true; but why true? Only because God is able to override all advantage or loss derived from created lawgivers by His larger rewards or penalties? Then it is God's might which makes His right. There is but one other answer to the question, Why does God's law always obligate? That is: because it is infallibly righteous. But the moment you assign this other reason, you inevitably introduce the primary moral distinction as wholly another than, and superior to, the distinction between natural advantage and loss.

The havoc which the Sensualistic philosophy makes in the foundations of ethics, presents one of the most crushing refutations. It is my purpose to employ this line of opposition to the full; and hence this attempt to familiarize the reader's mind to it.

§ 3. The philosophy of Hobbes, as partially revived by Locke, won many followers in England in the eighteenth century. In the hands of Hume, of Berkeley, and of Hartley, it bore very contradictory yet legitimate fruits. But the healthy sobriety of the British mind, derived chiefly from the general influence of the Bible, prevented this philosophy from gaining a full sway in its native home. Its history reminds us of some of the plants of other continents transplanted to Europe, which flourished far more in the foreign than in their native soils. It was when transplanted to France, that the Sensualistic philosophy disclosed its real powers of mischief. It found there a congenial soil, in a population restless, pleasure-loving, acute, and uncontrolled by any practical Christianity, ignorant of an enlightened Protestantism, and freed from the shackles of an effete Romanism. Here the daemon found for itself a "house swept and garnished." The real agent for naturalizing the ideas of Hobbes and Locke in revolutionary France was the Abbé de Condillae (whose philosophic works appeared from 1746-1777). The precision and neatness of his style, the apparent simplicity of his system, and the quiet boldness of his dogmatism. fitted him for pleasing a superficial and sensual age. Cousin ascribes, indeed, to Voltaire the place of a forcrunner, who prepared the way for Condillac. When the former visited England, he found the philosophy of Locke in full credit, and he adopted its principles with enthusiasm. Voltaire was a literary man, rather than a philosopher. But while utterly devoid of both the power and the patience necessary for correct analysis, he was master, to a transcendent degree, of the arts of

illustration, of persifleege, and of satire. These he employed not only to assail Christianity, but to disparage the philosophy of Des Cartes and Leibnitz: and thus he prepared an open field for the Sensualistic philosophy.

The title of Condillac's first work, "Treatise on the Origin of Human Knowledge," and every characteristic of his method, betray his indebtedness to Locke. His whole work is to push Locke's principles to their extreme results; which is begun in the earlier publication just mentioned, and completed in his "Treatise of the Sensations," eight years later. Like Locke, he begins by the vicious method of seeking "the origin of our ideas," instead of observing their traits and conditions. Bolder than Locke, he announces it as his purpose to show that every process of the soul is reducible to a single principle, and that is sensation. The simplification which seems to be promised by this result is seductive to the superficial thinker; but such a design cannot but make havoc of the modest and humble rules of true, inductive science. With Condillac, all the faculties, including what Locke distinguished as faculties of reflection, are generated by experience, from the one faculty of sensation, the only real power of the human soul. Thus Condillac precludes himself from those wholesome, though inconsistent, returns to rational views of the à priori powers of the soul, which Locke gains through the vagueness of his definition of the reflective acts. With Condillac, the favorite phrase is to call every operation of mind "a transformed sensation." Reflection itself is a transformed sensation-attention, memory, comparison, judgments, desires, volitions-all are but transformed sensations.

In order to carry out his project of ascertaining first the origin of our ideas, Condillac tells us that we must ascertain how the human being acquires his first ideas. But this first acquisition is made in infancy; and neither can we remember our own infantile experiences, nor

can an infant portray his to us. Hence, says Condillac, it will be unavoidable, that we shall make suppositions as to how the first ideas are acquired. Such is the preposterous foundation of the whole superstructure! He does, indeed, say that the consistency of this hypothesis concerning the unknown generation of our infantile faculties, with their adult operations, will be a guarantee that he surmises aright. But I reply, What guarantee have we that he does not misinterpret our adult experiences, at the imperious demands of a pre-conceived hypothesis?

His definition of perception is, "the impression occasioned in the soul by the action of the senses." Consciousness is "the feeling which a perception gives the soul of its presence in it." That is to say: perception is the soul's feeling of a sensible impression from with but, and consciousness is simply the soul's feeling that it feels. The reader must be careful to apprehend how. by these definitions, Condillac obliterates at once, and forever, those distinctions between the soul's acts of intelligence and of feeling, of understanding and of susceptibility, and conation, which, in sound philosophy, are so important, and in common sense, are intuitively recognized. Intellect itself is, with him, a susceptibility, no more: perception is a sense-impression, no more. All other processes, whether intellectual, emotional, or voluntary, are but "transformed sensations." Thus the impassable chasm, which forbids the reduction of the intellectual and active powers to the same element, is sought to be evaded by an arbitrary definition. proceed.

If the mind has but one sensation; or if one among several is made dominant by its own vividness, so that the others fade out, the mind is monopolized by it. This state we term attention. Thus, a sensation is attention, whenever it is exclusively vivid.

The susceptibility to be impressed by sense may be

divided between a present and a past sensation. "These we perceive both at the same time: to perceive, and to feel the two sensations is the same thing." This perception (or feeling) of the sensation which we had, in the past, is memory. Thus, as soon as a sensation belongs to the past, it is memory. So that memory also is "transformed sensation." "As soon as there is double attention, there is comparison; for to be attentive to two ideas and to compare them, is the same thing." But since attention is but sensation dominant, and comparison also is twin sensation, so, to perceive (or feel) a relation of difference or resemblance between two sensations is but to attend to the two together. Thus judgment arises, and the forming of propositions by the mind. Comparison and judgment, then, are but "transformed sensations."

We are often obliged to carry our attention from one object upon another, in considering their qualities separately. The attention thus directed is like light which reflects from one surface to another so as to illuminate both: and Condillac calls this "reflection." Thus reflection is also "transformed sensation."

Abstraction is nothing but the attention directed upon one quality of an object instead of attaching itself to all the qualities together. Reasoning is nothing but a double judgment, or one judgment within another. Imagination is only reflection combining images. So that abstraction, reasoning, and imagination also are but "transformed sensation."

After this series of analytic juggleries, Condillac reproaches Locke with not having carried his own system to its proper results. That philosopher, he complains, seemed to leave us under the belief that all these were, like the powers of sense, innate faculties. Whereas he should have discovered the principle of their generation, and shown them to be only acquired habitudes of the mind.

The intelligent reader will have perceived, already. an initial, and an insuperable difficulty at the foundation of Condillac's system. If all mental functions are "transformed sensations," and sensation is feeling, then feeling is the one original power of man's soul. But how is a system of cognitions to be built upon an exclusive foundation of feeling? Feeling is not idea. It is related to thought, as caloric is to light. It is a function of susceptibility, while thought is a function of intelligence. Where, upon Condillac's system, does idea come in? His answer to this question is: that sensation, by relation to the soul which it modifies, is a feeling; by the relation which it bears to the external object, it is an idea. This, the only answer possible for him, on his principle, is no answer at all. Let any man consult his own consciousness, and he will see that while an idea stimulates feeling, the one is not transformable into the other. As in the analysis of a solar ray, heat attends the spectrum; but the heat without the light could never give us the prismatic colors. Intelligence is necessary in order to the feeling itself. The mind must see, in order to be impressed; unless it is an unintelligent, compound organ. Here may be seen the amazing omission of Condillac's scheme; he leaves out that rational consciousness which is essential in order to sense-perception. How does mere impression from without result in cognition? Only as it is realized in our consciousness. That which makes all the difference between impression and perception, is the intelligent Ego: if the subject of the sensation has not seen it in his rational consciousness, it has not been sensation; but a mere organic vibration, a function simply animal, and unintelligent. Condillac's analysis gives us the occasion of ideas, in the external impression: it leaves the cause totally out of the question: it gives us the condition, but takes away the foundation of cognition. And here may be repeated the objection made

against the scheme of Locke: Condillac's whole theory depends upon a gross confusion of occasion with cause. It is perfectly true, that there is neither cognition, feeling, nor volition, until some object is presented to the mind, upon which it may direct its powers of intellection or activity. But this is wholly another thing from proving that the object generates any of these faculties or their actions. And a correct inspection will show us that the latter statement is not only without proof, but positively untrue.

Thus: according to Condillac, attention is but dominant sensation. This is an account of the matter essentially incorrect, in that it omits the Ego, the subject which attends. Let us inspect the various instances in which we exercise attention, and we shall see that we are able to give it to the one of several impressions which is not dominant: we can withhold our attention from the obstrusive sensation, to bestow it on the faint and obscure one. Yea, we can withdraw it from all sensations, to bestow it upon abstract conceptions. The will obviously comes into play here: the Ego is at once seen to be the essential factor, the objective impression the mere condition. Exertion of will is in order to attention, and therefore not the consequence of it. The brightening of the idea attended to, until it rises into dominancy, is the effect, and therefore not the cause of our volition. So, it is equally shallow to say that comparison is but a dual attention. Attention to two ideas is indeed the condition of comparison: no more. The relation of equality, difference, or the like, is a new idea not reducible to the idea of either of the objects of the dual attention; not seen in but between them.

Condillac divides ideas into two classes, sensible and intellectual. The only difference which he makes between the two is, that the sensible idea represents an object which is actually operating upon our senses: the

intellectual represents objects which once operated and have now disappeared from before the senses. If everything in the mind is transformed sensation, this is of course the only distinction possible. But the distinction is obviously false. We have an intellectual idea of empty space, of abstract duration, of cause, of spirit as that which thinks, of God, of infinitude. Have either of these ever acted upon our senses? Something phenomenal may have been the condition of the rise of these ideas; but it is impossible that it should have been the source. This source must be sought, then, in the reason itself.

If sensation is but impression relatively to the mind itself, and idea only as it is related to the object, then, of course. Locke's definition of truth in our ideas must be adopted in its fullest sense. Truth can only be the conformity of our ideas to their objects. The representative theory of perception must be held in its baldest form, with all the absurd consequences fixed upon it by Dr. Reid. And it is equally clear, that the sceptical result which Hume drew from that definition, must follow in the most rigid form. For between an object and the feeling with which it may impress us, there is obviously no relation of identity. The mind has no more real cognition of the true nature and form of the thing which impresses it, if sensation is relatively to the mind only impression, than an animal in the pitchdark which is hurt by a blow knows thereby the form of the being who struck it. It only knows that it is hurt. Our perceptive ideas must be merely relative to our subjective law of feeling. We are rigidly confined within the charmed circle of our own spirits, and can never know that there is any correspondence between our ideas and objective realities.

When Condillac proceeds to deal with our abstract ideas, he follows closely the false analysis of Locke; as indeed his reduction of everything to "transformed

sensations" necessitates. With him our idea of space is nothing but that of an object extended. Our idea of substance is nothing but that of an aggregate of perceptible qualities. Our idea of duration is only a modification of our experience of succession. The infinite is only the undefined. It is not the purpose of this chapter to give the detailed refutation of these statements. But in order to put in a caveat against their acceptance, we beg the reader to consider, in passing, this result. If anything is certain in our consciousness. it is certain that we can only think properties as referred to a substance whose properties they are. Condillac ridicules the attempt to form an idea of "being in itself;" being, separated from all perceivable properties: and his ridicule is just. We only know substance through some properties belonging to it. And it is equally certain, that we only know properties as referred to some substance in which they inhere. "Property in itself" would be as impossible an idea as "Being in itself." Thus, if we have no other idea of substance than merely an aggregate of properties, our cognition is reduced to a zero, and the result is an absolute nihilism. If there is no valid idea of substance, other than of an aggregate of properties, then our conscious spirits are nothing except a series of successive ideas and feelings: and after these are reduced to naught, spirit itself vanishes! Thought and thinker both disappear together in the abvss of Nothing.

Condillac, like Locke, as we might expect, advocates the most extreme Nominalism. Deductive reasoning he declares to be nothing but the equating of indentical propositions. In his view, every process of deduction is precisely like the algebraic equation, in which one thing is set equal to another, and that again to another, until a solution is reached. He is also famous for the maxim, that "A science is only a language well constructed." These points are only mentioned now, in

order that they may serve to illustrate the erroneous theory of the syllogism advanced by Locke and his followers, when we proceed to the more thorough testing of the principles of this philosophy.

Let us now proceed to inquire what account Condillac gives of our moral states and acts. As he generated all the faculties of the understanding from simple sensa tion, he gives us the same source for all the faculties of the will. Every sensation, says he, is more or less agreeable or unpleasant in itself; for it is a contradiction to speak of feeling which is neither the one nor the other, and sensation is feeling. Now when present sensations give us feelings positively painful, or less pleasant than our previous ones, we cannot but compare the two states as to their relative pleasure. But Condillac thinks he has shown that comparison and judgment are but "transformed sensation." The rise in memory of the conception of the object which, experience tells us, could give us the increment of pleasure, is also a transformed sensation. Now the judgment, which connects the pleasure with that object, is desire. What is it we do, when we desire? says he; we only judge a pleasure connected with a certain object. From this desire modified, he generates, also, passions, as love, hatred, hope, fear, joy, will. All these then are but "transformed sensations." A passion is but a desire which excludes all other desires for the time, or is, at least, dominant over them. Volition itself is but "an absolute desire, and such that we think the desired object in our power. The words 'I will,' mean, I desire, and nothing can oppose itself to this my desire; all must concur with it."

This is the passive theory of Hobbes, in all except the names. Desire is but sensation transmuted, or reflected back, and drawing us towards the object whence the sensitive impression came. *Condillac* ought to have inferred from this view, as Hobbes does, that the soul

has no real freedom. For obviously, it does not exert that determining freedom as to how objects without shall impress it. But if desire is but this impression transformed, and if strong desire, with opportunity, is all of volition, then, clearly, I am no more a free agent in choosing an object, than I was in having the senseimpression happen to me, by the befalling of the outward object before me. Atalanta's free-agency had no more to do with her deciding to stop and pick up the golden apples, than it had to do with the fall of them in her path. So far as her choice entered, the one was as much fated as the other. But without true free-agency, responsibility is at an end. What room remains for a true moral system, on any plan whatever, it is impossible for us to see. It is true that in an appendix to his "Treatise of Sensations," the author tardily and inconsistently asserts the liberty of the soul. Experience, says he, teaches the sentient being to curb its desires, by the acquaintance which it has gained of the painful consequences of indulging some desires. This remembered experience appears in the problem, in the formof deliberation. The soul learns experimentally that this deliberation can and does cause the mischievous desire to subside, which otherwise was about to become volition by growing into denominancy. When this lesson is empirically learned, self-government begins, and the being is then a rational free agent. Our notion of power is nothing but a combination of these two empirical ideas: first, that one may not do a thing (to which desire inclines him), second, that he still has the necessary faculties to do it. The consciousness of these two facts is our notion of power: as soon as the mind apprehends it, it knows itself free. "Liberty consists, then, in determinations, which, while they always recognize our dependence by some part upon the operation of objects upon us, are the result of deliberations which we have made, or have had the power of making," Such is the abortive and inconsistent scheme by which the author, after closing his work, seeks to retract the fatalistic consequences inevitable in it.

The objection to the whole scheme is, that it again confounds a condition of free volitions with their efficient. In the obstinate and blind resolve to generate everything in man's soul out of simple sensation, the analyst practically leaves out the soul itself. He forgets this prime factor in the function; the personal spirit. the Ego, with its original, innate spontaneity and the innate laws regulative thereof. Objective impression is indeed the occasion upon which spontaneity asserts itself in volition. That the objective impression is no more, is proved by the testimony of every man's consciousness: for who does not know that he often curbs and repells those impressions? It is proved by the fact that the same object is often no motive to volition whatever, with one man, while it unfailingly occasions it in another. How is it that like causes do not produce like effects? The utter emptiness of Condillac's theory of volition is also shown by this remark: wholly leaves out original dispositions; indeed it has no place for them. But these are main elements of the problem, because they are the chief features of it, needing to be accounted for upon his scheme; and they have more than all else to do with every case of volition, as its regulative cause. Take Condillac's statement in its simplest and most rudimental form; all impressions are either painful or pleasurable. How comes a given impression to be the one, rather than the other? Notoriously, some objects are painful to some beings, which are pleasurable to others. There is obviously a law of disposition, which determines, à priori, whether a given objective impression shall be attractive and repulsive. Since this law must preëxist in order to any instance of attraction or repulsion, it is impossible that it can have been generated by attractions and repulsions.

In that law is the spring of subjective desires; activities of soul for which the Sensualistic theory has no room, which yet every man's consciousness reveals to him as the very key of all his outward actions. In a word, Condillac, like Hobbes, has overlooked the all-important distinction between sensibility and conation: two constitutive and original powers of the soul, neither of which can be transmuted into the other.

Upon his theory of the process of deliberation, we make here the following obvious remarks. Since it is the remembered experience of the pain incurred by indulging a given desire, which makes the counterpoise, deliberation is but the attraction of desire against desire; no other principle can be consistently admitted by Condillac. So that we are virtually back at the solution of Hobbes, who regarded deliberation as the libration or see-sawing of two objective impressions competing to impose themselves on the soul. Where is the liberty, on this scheme? The soul, like the child's see-saw, is only victim, not agent. Next: there is no essential difference in this scheme, between the deliberation of a man, and the hesitancy of a beast. In each case, we have one impression against another impression. actual or remembered. The only difference is the non-essential one, that the human animal, having more memory and intelligence, is more liable to the process than the more impulsive and unintelligent brute. Last: this theory of volition leaves out the moral motive as effectually as Hobbes'. We have here a balancing of natural advantages, but no higher standard of obligation or rectitude.

But what, according to *Condillac*, is rectitude? His "Treatise of Sensations" knows no other good or evil than the natural. Hence it must follow logically, that there is no other rational motive for man than self-interest, and no other rational end than pleasure. The author himself avows another consequence; that good

and evil are not permanent distinctions, but are only relative to the sensibility of the individual. There is left here no basis whatever for a system of obligation and duty. It is true that Condillac, in a note, says: "The above propositions apply only to the distinctions between good and evil, which a man would derive from the experience of his own sensibilities, while solitary. When brought into society, he would find that 'all which he has called good will not be morally good." Is the moral distinction then generated by the will of society? So it would seem, on his theory. But who are the integers who compose society? Only human beings similar to this solitary integer, who knew no other good or evil than his own selfish pleasures or pains, and liable to the same errors as to the morally good, with him. Obviously we have here no genesis for a true moral idea; we have a mere generalization of the idea of self-advantage. Condillac cannot but see this: and hence, when in other places he is obliged to define moral good as conformity to law, he grants that a law merely arbitrary would not create obligations, nor would conformity to it be virtue. Law only does this. he says, when its requirements are agreeable to God's law. Why, then, does God's law found obligation, and why is conformity to it virtuous? The only answer is, because the divine law is the expression of intrinsic righteousness; but that answer Condillac cannot give; his system has no place for an à priori idea like this. So that the moral distinction is still as completely left out, as at the beginning. The best solution he can give is this: Laws are not arbitrary when they are dictated by the wants and faculties with which our Creator has naturally and generally endowed men; and when the act or neglect which the law prohibits would bring its own natural penalty. Such laws as these obligate, and for that reason. Still. I rejoin, there is no moral motive. For the wants of

which Condillac speaks are, on his system, physical; and the natural penalties of their violation or neglect are physical evil. Still we have no good but pleasure or pain, and no motive but self-interest; righteousness there is none in the whole scheme: the idea of it is really left out wholly. This definition of moral good as conformity to law curiously confirms my charge, that the Sensualistic philosophy has no place for any moral science. The very principle of that philosophy is, that the mind has nothing save what sensations give it. But morality can neither be seen, heard, touched, tasted, nor smelled. What is Condillac's reply to this? Morality is visible, says he: for it consists in actions conformable to law, and the actions are visible, and the law is visible! How could a more emphatic confession be uttered, than this wretched statement, of the justice of my charge? It is too plain to need remark, that a formal act does not constitute morality. Its morality is in its intention, its subjective motive, the conformity of this motive to an à priori, rational standard, of which sense can have no cognition. Law is not morality because it is law; but because it is righteous law. And this abstract quality of righteousness, again, which alone characterizes the law as a moral standard, is invisible to eye-sight.

Condillac is, again, inconsistent with himself, in asserting, in other works, the simplicity and spirituality of the soul, which the consistent reader of his main work, his "Treatise of the Sensations," is there virtually taught to deny. If sensations are absolutely the sole sources of all our ideas, since sensation only informs us of the being and property of bodies; what business have we with spirits? They should have no place in our science: they are neither visible nor tangible. But Condillac held the simplicity and immateriality of the soul, and in one place argued for it with a most inconsistent conclusiveness, from the process of comparison,

which, in all other places, he describes as merely a transformed sensation. The comparison of two objects in a cognitive subject, says he, must imply the absolute unity and permanent identity of that subject. It supposes a centre, where the different terms of the comparison are assembled. Locke spoke foolishly, when he stated that for aught we can know, some arrangement of material parts combined together, may be endowed by the Creator with the ability to think; because, as Locke says, we are ignorant of what matter may be capable, not knowing many of its qualities. This ignorance, answers Condillac, grounds no such conclusion. It is wholly unnecessary to be acquainted with all the properties of matter, to be certain that matter cannot think. "It is enough to remark that the subject of thought must be one. Now a material mass is not one; it is a multitude." Here Condillac speaks like a true philosopher; but he speaks against his own principle. If monadic spirit is the necessary middle term in every comparison, then the resulting judgment is something else than a "transformed sensation;" it is a distinct idea generated by the understanding, not given to it.

So far is Condillac from adopting the materialistic conclusion to which his system fairly leads, he leans rather to idealism. Having committed himself to the representative theory of perception, he draws from it the conclusion which is inevitable, that our perceptions are only valid relatively to ourselves. We must, says he, "take good care not to think that the ideas which we have of extension and movement are conformed to the reality of things. Whatever may be the senses which give us these ideas, it is not possible to pass from what we perceive to what really is." Here he is traveling the same road which led Bp. Berkeley to a denial of the reality of the objective; and Hume to universal scepticism. We shall see that this is not the last in-

stance in which the Sensualistic philosophy has led to the inconsistent result of idealism.

Once more: the "Treatise of the Sensations" seems to leave its sensitive subject devoid of all cognition of a God, and possessed only of certain superstitions which contradict themselves. This is consistent. Sensation itself shows us no God. But in subsequent works, the author presents an à posteriori argument for the existence of an infinite God, which, in less inconsistent hands, would be sufficiently sound. The multitude of dependent effects which surround us must ultimately lead the mind to an Independent Cause. Our conscious limitations of being necessitate, as a complement of our thinking, some Being absolute. This process would be valid, upon two conditions: That the mind be assured that a cause of every effect is a law necessary and universal; that the mind be capable of apprehending the reality of the infinite. But what room is there for either of these beliefs in a system of "transformed sensations?" Each man's sensitive perceptions are partial and particular: they can contain in themselves no universal, necessary truth. Sensation can only be of the definite and the limited: how then can it contain the infinite? In fact, Condillac nowhere discusses or states the law of causation as a necessary truth: he simply omits it. But here he inconsistently assumes it, contrary to the spirit of his system. These inconsistencies were probably forced upon him by the influence of prescriptive opinions, and of the current beliefs of the age out of which he grew. The age which he helped to usher in was a bolder one; and in carrying out his method, it did not hesitate to avouch the legitimate corollaries of materialism and atheism.

4. The rashness and audacity requisite to avow the full results of the principles of Locke, and especially of Condillac, were found in the French writer Helvetius, whose noted work, "L'Esprit," appeared in 1758, just

when the labors of his predecessor had placed the Sensualistic philosophy upon the throne of popular opinion in that country. This book propounds a theory of the human mind, as a foundation for a moral theory, which begins with the principles of Condillac, and only differs from him in dropping his amiable inconsistencies. According to Helvetius, as according to his predecessors, the problem of philosophy is to investigate, not the properties, but the origin of our ideas. Man has but two mental powers, sensation and memory, which are both passive powers. Sensation is purely a physical susceptibility: and memory is but sensation prolonged and enfeebled. Judgment is also but sensation modified; to say "I judge" is the same thing as saying "I feel." Our ideas of space, duration, spirit, infinitude, are but illusions of thought. We really know nothing of space but extension, of infinitude but the indefinite. Errors of judgment arise wholly from passion and ignorance. Our mental processes are essentially the same with those of brutes; and the only reason that man is in a higher state than they, is, that his corporeal organization gives him a superiority, and especially the capabilities of his hands, as compared with their hoofs and claws. Liberty is an illusion, save as it is the liberation of our bodily members from material bonds; freedom of will is an idea of which philosophy can know nothing, and which can only be held, if held at all, on the authority of theology. As all ideas are merely relative to our own susceptibility of impression, certainty is impossible, and absolute or necessary truths there are none. All ideas are but probable appearances; and a calculation of probabilities is the only reasoning possible. Helvetius revives the supposition of Locke, that a body organized somehow of matter may possibly be sentient, and thinking; and to this opinion he gives the fullest weight of probability. Indeed he leans to the opinion, that all matter is, if we but knew

it, sentient. "One can only understand by this word. matter, the collection of all the properties common to bodies. The meaning of the word being thus determined, it would only remain to know whether extension, solidity, and impenetrability were the only properties common to all beings. May not the discovery of such a force as attraction, for example, make us suspect that bodies have properties still unknown, such as the faculty of feeling, which, while only manifesting itself in the bodies of animals, may vet be common to all bodies?" Have we not here, in different words, the same conclusion which is presented to us in our own day, as the last result of its "advanced thought?" Of God and of immortality Helvetius, of course, knows nothing; and of the former his work speaks not one word.

It will not be hard for the reader to divine what kind of moral theory this author deduces from such a psychology. It is, of course, a system of unmitigated and supreme selfishness. Enjoyment is man's only rational end: and the only enjoyment is physical, the pleasures of the senses. The universal motive of action is selfinterest craving this end and shunning the opposite. This is equally the sole motive of individuals and of societies and nations. The man who will rise above prejudices and self-flatteries and make a true analysis of motives, will find that he never performed a deliberate act from any other motive than self-interest, and that mankind never does. What, then, is the motive of a sympathetic act, relieving the suffering of another without reward? Says Helvetius, the motive is nothing but the selfish desire the agent has to deliver himself from the instinctive pain of sympathy! So, when the affectionate mother practices what the world calls disinterested devotion to her children, her real motive is the selfish desire to enjoy the self-gratification and the applause attached to such actions. Is any gratitude due, then, from any beneficiary to any benefactor? Strictly, none:

the benefactor has no right whatever to claim gratitude. Society, perceiving, from the view of self-interest. the advantage of encouraging and multiplying such benefactions, diligently inculcates the sentiment of gratitude; but it is an artificial sentiment which men feel they are interested to propagate; nothing more. So, the most splendid acts of patriotism are simply acts of self-gratification. When the elder Brutus ordered the execution of his two sons, it was only because the passion of patriotism was more imperious than that of paternity. When the benevolent man does good, and the malevolent mischief, it is simply because, to the nature of one, the sight of good has become by habit a selfish enjoyment, and to the other, the sight of suffering is agreeable. Both are equally consulting their own selfish pleasure. Society, moved by self-interest, and perceiving its advantage in the multiplication of benevolent and patriotic actions, assiduously fosters the self-gratification and applause now attending them, and this is the whole account of what men call approbation. The probity of an action is nothing but its utility.

From this code it follows; and *Helvetius* boldy avows the corollary; that there are no duties of self-restraint from any acts not visibly injurious to our own enjoyment. There can be no sin in any sensuality which, on the whole, confers pleasure. The wretched trade of the Cyprian is to be regarded as, on the whole, approvable; because their luxuries stimulate the handicraft arts, and circulate money.

The virtues of modesty, chastity, and temperance are the objects only of his gibes: he labors to show from history, that they are unnecessary follies. Love and friendship are with him simple results of selfishness: for their appetencies are nothing but the expressions of a selfish want. Of the affection of the sexes, he knows nothing but animal lust, and sneers at all else as an insolent affectation. The sole impulse to friendship is

the sense of pain which one feels for lack of a vent for the expression of the predominant passion of the hour. If a man is prosperous, his only need of a friend is that he may indulge himself through him, in the selfish vaunting and a contemplation of his welfare. If he is in adversity, then he needs a fellow, simply as an object by which he may gain the selfish relief of querulousness. (See Bernard Mandeville's "Fable of the Bees," etc.)

If the motive of action is thus absolutely simple and uniform, how comes it that men differ so much in opinions and conduct? This arises, says he, solely from ignorance: it is because men do not understand alike the actual effects of actions on their own wellbeing. Hence, all that is necessary to procure uniform virtue, is, that the rulers shall diffuse intelligence. The whole art of ruling well consists in teaching men perspicuously what sorts of action will, on the whole, result in most pleasure, and in directing and stimulating them by the hope of sensual gratifications. men's natural capacities are equal; and all the differences of character and talent are caused by education. For, indeed, the sole attribute of the mind is a capacity to be impressed. The only faculties are sensation and memory; and all the rest are merely modifications of these. Character is naught but a congeries of acquired habits; and these are the handiwork solely of the outward impressions to which the person is subjected, and whose occurrence is to him fortuitous and unavoidable. Hence, it is obviously absurd to hold a man responsible for his character and principles of action; for they are in no sense of his choosing, but are results of a passive power in his nature, operated on from without. would be precisely as unreasonable to hold the man responsible for these principles, as to hold the stone responsible for the cavities worn in it by the continual dropping of the water. With man's free agency denied,

and his active principles turned into results of a passivity, it is obvious that no basis whatever is left for a system of ethics. Man is simply a more accomplished beast, with certain instincts cultivated by the circumstances incident to his gregariousness. It was not necessary for *Helvetius* to draw the conclusion, that man has no immortality, and is subject to no future rewards and punishments. The sensual and infidel Frenchman needed no help for this, but speedily ran to the conclusion, "Death is an eternal sleep."

We thus see the Sensualistic philosophy, unintentionally revived by Locke, and furthered by Condillac. flower out in the bold hands of Helvetius into its This audacious speculator leads us matured results. down to the worst conclusions reached by the philosopher of Malmesbury, more than a hundred years before. Unrestrained by that thin show of respect which the Christian sentiment of England imposed on Hobbes, causing him to veil his virtual atheism, the insolent Frenchman discloses to us what are the real results of the dangerous maxims from which the Sensualistic philosophy flows: he interpreted his master, Condillac, as Mandeville did Hobbes, and as Collins and Hartley did Locke. This miserable book was received with acclamation by the French society which had been trained up under the tuition of Voltaire. Even a Rousseau could see its mortal taints, and protest against its manifest materialism and atheism. But Helmetius was hailed by the sceptical multitude as the greatest of the interpreters of human nature; and his system of naked selfishness and sensuality became the "mode" with the genteel mob of Paris. It thought, with Madame du Deffant, that he was "the man who had told everybody's secret." Here should be repeated the remark which I made upon the scheme of Hobbes: that its plausibility arises wholly from the fact, that the instances upon which it is supported are taken ex-

clusively from diseased specimens of human nature. Helvetius analyses, in a pretentious and imperfect manner, the motives of the depraved, the Godless, the sensual, the supremely selfish; that is, of the debauched society amidst which he lived; and he had no trouble in finding self-interest and animal good their exclusive rule and end. He had only to treat as hypocrisies the judgments of reason and conscience, which are so influential in all natures not fatally debauched, but which he and his had covered up beneath the sordid accretions of their sensuality; he had only to sneer them off the stage; and his work was done, to his hand. Cousin, when describing the system of Helvetius' expounder, Saint Lambert, remarks upon the citation of the moral independence of Cato, who, in the midst of his overthrow, preferred the testimony of a right eous conscience to the guilty prosperity of Julius Cæsar.

"Victrix causa Diis placuit, victa Catoric." But this instance is overwhelming to the selfish system; for public opinion and advantage were wholly on the side of Cæsar: and had these been the rudiments of Cato's moral system, he should have envied the guilty but prosperous conqueror. The critic then remarks, with fine sarcasm, "I cannot imagine how Saint Lambert was so maladroit as to invoke such a reminiscence. It is an act of justice we must render to Helvetius, that he chooses his examples much better: he cites none but tyrants and strumpets."

§ 5. Helvetius was too outspoken in declaring the consequences of the Sensualistic philosophy, to complete the work of corruption. The better classes of the French people recoiled from the naked enormity of his conclusions. The Church condemned his book, and even compelled the author to sign a recantation, in which he exercised all the unblushing falsehood which his doctrines naturally sanctioned. The Sorbonne de-

nounced his system. Even the old autocrat of infidelity, Voltaire, dissented, and the sentimental Rousseau earnestly protested against the sensuality and materialism of the scheme. The sounder thinkers, like Turgot, exposed the conclusions and the premises. It remained for the friend and literary executor of Helvetius, Saint Lambert, an old and mediocre poet, to place a coating of decency upon his nauseous principles, without in reality amending them in any respect. The result was their general adoption, during the revolutionary epoch, by literary men and politicians of the new party. Saint Lambert, when a very old man, and not far from the end of the eighteenth century, left the walks of the muses, and published his "Principles of Morals among all Nations: or, Universal Catechism." This work was applauded by his cotemporaries, and one of the decennial prizes which the government of the Consulate had decreed for the encouragement of those who reflected honor on the nation by their works, was decreed to him in the most complimentary terms.

Saint Lambert's point of view is clearly disclosed by his praises of Helvetius, of Locke, and especially of "Helvetius," says he, "is the first moralist who has made use of the principles of Locke; and he employs them without pedantry and without obscurity: he aims to show the effects of the three principal causes of our errors; our passions, because they make us see objects under only one aspect: ignorance of facts; and the abuse of words. In treating of this last cause of our errors, he refers to Locke: but it is after having gone much farther than he went. Concerning virtue, he gives us notions clearer and juster than any one has had before him. It results from his principles, that the thing which has most retarded the progress of morals is the habit of attaching the idea of virtue to actions, to a conduct, which are not useful to any one, and of separating particular interests from the general interest." (Thus self-advantage is assumed as the only moral end.)

"Hobbes is the first who has had clear ideas about that portion of freedom accorded to our souls. His opinion about the right of nature has been much censured; it yet appears to me the truest which there is concerning this matter; that is to say, that there is no right of nature."

The morals of Saint Lambert know, in fact, no spirit, and no God. The latter is left out of his system. He has nothing whatever to do with duty, obligation, or sanctions. The idea of future rewards and punishments is as totally omitted, as though he were writing of pigs. Says he, "A man upon entering the world is only an organized, sensitive mass; from all that surrounds him and from his own wants, he receives that mind, which may be, perchance, the mind of a Locke, or Montesquieu, that genius which will master the elements and measure the skies." "Man is sensitive to pleasure and pain: these sensations are the sources of his cognitions and actions. Pleasure: pain: These are his masters: and the business of his life will be, to seek the one and shun the other." "Nature creates our souls" by means of the ideas which strike our senses. Satirizing the "superstitious moralists," whom Helvetius had termed contemptuously, "hypocrite moralists," he says: "They propose, by the sacrifice of the pleasures, to merit that happiness which they have placed beyond this life. With them the present is nothing; the future is all. And in the finest parts of the world, the science of salvation has been cultivated at the expense of happiness."

According to Saint Lambert, the only moral motive is animal good: and the only moral standard is public opinion and the utility of our actions. Conscience is simply a sentiment; the pleasure or pain, namely, which arises from perceiving that our act has incurred the

reprobation of public opinion and has been destructive of pleasure. In proof, he offers the fact that we usually blame ourselves for the actions which public opinion blames, and for no others. Our instinctive principles of action, as they are called, if they go beyond the desire of pleasure and aversion to pain, are nothing but the results of associations which experience teaches us to form between our sensations.

The "Universal Catechism" begins thus: 1. "What is man?" Ans. "A being sensitive and rational." 2. "As sensitive and rational, what ought he to do?" Ans. "Seek pleasure, and avoid pain." 3. "Who are those who love themselves aright?" Ans. "Those who do not separate their own welfare from the welfare of others." "What is virtue?" Ans. "It is a habitual disposition to contribute to the happiness of others." It is true that the author also deduces some respectable rules; such as these: "Why is pride a vice?" "Because it injures ourselves and others." "Whether powerful or feeble, mortal, be just to all men." "What is justice?" "A disposition to conduct ourselves towards others as we would desire them to conduct themselves towards us." But from the principles of the Sensualistic philosophy, these good precepts are only inconsistencies. If man has no other rational end than to seek pleasure and shun pain; if he is to have no hereafter; and if he is not related to an infinite rectitude in any divine ruler, then it can never be shown to be rational to seek the happiness of others at our own expense. No duty involving self-denial can ever be demonstrated. For, why should a man forfeit his highest rational end, for the sake of any other end? Will Saint Lambert say, that the pain of denying ourselves a sensitive enjoyment must be chosen, rather than the pain of braving adverse public opinion? Or will he say: Sensitive pleasure must be postponed to social and intellectual ones? Let us suppose the transgressor to answer: "I am so constituted as to be callous to the pain of adverse public opinion, and to intellectual joys, and to the pain of witnessing my fellow creature's misery." This philosophy has no answer: To that man, the supremely selfish conduct is the most rational, and therefore the most proper, wherever he is not restrained by force.

I have thus presented, in brief outline, the history of the earlier Sensualistic philosophy of modern Europe, because there is no way so profitable for learning the true nature and tendencies of a system. The reader may be assured that there is no waste of time and labor in such a review. It teaches us by the sure lights of experience. As we see these first principles, in successive ages, and in different countries, leading the most diverse spirits towards or to the same malignant results, we become assured of the falsehood and danger of the premises, as no mere speculation could convince us. We see a pure and pious Locke, a perspicacious ecclesiastic like Condillac, an aged literary coxcomb like Saint Lambert, pursuing their deductions from the primal error, which denies to the human spirit all à priori ideas and judgments, assigning to it nothing but perceptions and their results. They are restrained in part by their prescriptive opinions, and their tempers and educations. But they yet travel in the same direction with the hard-mouthed, atheistic Hobbes, and the debauched roue, Helvetius. They stop short of the most extreme conclusions of the latter, only in virtue of a happy inconsistency. The tree is known by its fruits. Moreover, the social consequences of the partial prevalence of these opinions have given the world a lesson which it should never forget. Men often stigmatize metaphysical philosophy as shadowy and vague: they call it cloud-land, contrasting the instability of its positions with the practical and useful truths of physics, as the fickle vapors are contrasted with the solid ground. Let us accept the similitude for a moment. We are at once reminded that it is from this cloud-land. the most beneficent and the most destructive agencies descend, which bless or devastate the habitations of men. From those shifting clouds descends the genial rain, which waters the earth, making it yield bread for the eater and seed for the sower. Thence also descends the mighty wind, which wrecks the costliest works of man and buries the mangled builder beneath his own Thence falls the thunderbolt, which in one instant dashes him into death. The philosophy of the infidels and Sensualists of France was the storm-cloud from which fell the most ghastly ruin witnessed in modern times. The reign of terror was the offspring of this philosophy. It was under its express guidance that the legislature decreed God a non-entity, and death an eternal sleep; that divine worship was formally abolished, and a courtesan enthroned as the Goddess of Reason; that the guillotine stood "en permanence," pouring its stream of innocent blood down the street daily; that the prisons were crowded with the noblest and best of the land, and emptied by indiscriminate massacre: that marriage was superseded, and twenty thousand bastards were born to Paris in one year; that the skins of human victims were actually tanned in the tanneries, and employed for common leather. It scarcely needed the atrocities and frenzy of the Paris Commune in our own days to give every reasonable man assurance that the same tree will ever bear the same fruit. To sum up the whole in one word, the theory which begins by denying to man his spiritual attributes, naturally ends in making him an animal.

None can deny, in the light of this history, the powerful influence of philosophy upon human well-being, either for good or for evil. Is this subject of thought, then, irreducible to a science, as the forces of the clouds and winds were for our forefathers? Are metaphysical

inquiries incapable of coming into the form of any true and practical science which may yield us safe rules of precaution and of moral proceeding: because the subject is incapable of measurement in magnitudes and numbers? If we are to submit to this conclusion, then we must be resigned to regard the moral and spiritual powers of human nature, just as our primitive forefathers regarded the forces of the sky, as things real. terrific, but unknowable; whose devastating powers may burst upon us, we know not when: which we can no more resist than we can prognosticate. One thing is certain: the mental and moral sciences cannot be formulated by imposing upon them the "Positivist" method; for this is to annihilate them, by destroying everything characteristic of that rational spirit which is their subject. May we not hope that, as the genius of a Maury has at length found the laws of those meteorological forces which, to former ages, were only unknown fears; so the patience and humility of other inquirers will finally settle the laws of spirit, and build a philosophy which shall command the confidence of all? But if this is ever effected, it must be by the same modest and faithful methods by which Maury has tracked the viewless winds. We must not arrogantly begin with hypotheses as to the sources of the things we examine: nor resolve that nature shall be forced, whether or no, upon the Procrustean bed of our simplifications. We must begin by the faithful and painstaking inspection of the facts of consciousness, and learn from the qualities of these facts by a true induction, what nature shall choose to disclose to us of her methods.

CHAPTER III.

ANALYSIS OF THE HUMAN MIND, BY JAMES MILL.

THE foremost English name in the false philosophy of the nineteenth century is that of John Stuart Mill, who has recently passed from the stage. The plea for the Sensualistic philosophy, which we propose to review in this chapter, was written by his father. shall find that in most respects the son has inherited not only the name, but the opinions of the family. One of the later acts of the son's life was to edit a complete edition of this work of James Mill, with copious notes by himself. Professor Bain, and the historian Grote. The relation of paternity which the father bears to the system of his more famous and influential son, gives great importance to this book. I have selected it as the clearest representative of the revived philosophy of sensualism in our century, as it is one of the earliest. We shall now see this false system proceeding from the same postulates, and advancing to the same conclusions, which we briefly reviewed in the previous century. Its first principle is: "Nihil in intellectu quod non prius in sensu": its last deduction is, again, materialism and atheism.

One of the most remarkable traits of the work of James Mill is, that we have here a psychology, without any mention, even the slightest, of a soul, or God! Morell, noting the latter omission, finds it the natural result of his principles: but he adds: "Whether the author would have sanctioned such inferences, I have no means whatever of judging." The autobiography

lately published of his son supplies that means: for I. S. Mill tells us, with an indecent boldness, that an embittered hatred and scorn of Christianity was one of the chief traits of the parent whom he so greatly revered. We may remark in passing, upon this, as a characteristic instance of the quiet insolence of infidelity. Let a theologian offer any discredit to a quality which these gentlemen have chosen to select, as an object of their own value and veneration, such as the quality of philosophic liberality, or toleration, and they visit upon him their keenest resentment. But let Mr. James Mill outrage the conscience, heart, and reason of all Christendom, by selecting for his spite and contumely that system which the wise and good of all ages have venerated for its supreme purity, tenderness, and beneficence; and he is to be tolerated with a scientific equanimity, if not positively applauded for his candor! This is one specimen of the dogmatism of science: a fault which threatens in our day to surpass the imperious bigotry of mediæval theology.

Mr. James Mill's system of psychology is extremely simple and perspicuous. He undertakes to construct a complete science of the human mind and will, of two elements: sensations and association. And this attempt is so literal as to omit from his postulates the being of mind itself! It is true, that he is sometimes betraved into inconsistent references to the percipient self; for this is the penalty which common sense exacts of all who attempt to reject her. But not only does Mr. Mill omit all definition of mind, or spirit, as substance, and ignore the question whether it is immaterial substance: not only does he expressly deny all à priori and all necessary powers to the mind, except those of association; he says expressly, that the affections which we term states of mind, are the mind. A sensation is, with him, "a point of consciousness." Such "points of consciousness compose our sentient being," (pp. 13, 17). With

him, consciousness is but another name for all the mind's affections. To him, our feelings are our consciousness. He thus rejects all reflective character in consciousness, while he rejects the power itself from the rank of a faculty (pp. 225, 226). It is simply the general name for all mental affections in his scheme, and in reality amounts to no more than a passive power of sensibility to impression. Again, like Condillac, he almost uniformly calls sensations feelings. Like him, he begins his analysis of the bodily senses with that of smell, for the very purpose, as it would seem, of reducing all sensations, including the visual, to the grade of a smell, a mere impression of a sensibility, a feeling, as distinguished from an intellectual notion. (See pp. 71, 223, 224.) So, ideas directly gained by sense-perception are also currently called "feelings;" and the only description we have of a simple idea is, that it is a trace, or "copy of a single sensation." Everywhere, ideas are "copies of sensations." The only account we get from him of the perceptive process, is that "a copy" of the sensational "feeling" remains in the mind after the sensation has gone; and that copy is the idea. It is, of course, less vivid than the "feeling" of which it is a copy.

Another radical trait of Mr. Mill's system, with which the reader must be acquainted from the first, is his assumption (without proof) of that definition of cause which makes it only an invariable and immediate antecedent of the change called effect. That this is all of the rational idea of cause—that the notion of power in cause is an illusion—is, with him, a maxim neither to be debated nor questioned. And he is fond of asserting that it is a maxim so well established by his school, that repectable philosophers have ceased to debate it. This theory of causation is applied everywhere (and as we shall see, is virtually applied, in a vicious circle, to prove propositions on which it depends). Thus, in explaining the origination of a tactual sensation, the whole

is accounted for as antecedent and consequent phenomena: the organ of nervous matter and tangible mass being the antecedent; sensation the consequent. Thus, the true cause of the sensation, soul, is quietly left out, the whole effect being in the sequence of changes alone. "The expression, 'I feel the table,' includes both the antecedent and consequent" (p. 33). And the proceeding of the argument shows that, in the author's view. the expression includes nothing more. Again, on p. 51: "Sensation exists only by the presence of the object, and ceases upon its absence; nothing being here meant by the presence of the object, but that position of it with respect to the organ which is the antecedent of sensation." Thus, by cleaving to this view of causation, in its baldest literality, soul is again dropped out, as the unseen percipient power, and nothing remains but a pair of phenomena. So, in the definition of associated ideas, we are taught (p. 78): "Our ideas spring up, or exist, in the order in which the sensations existed of which they are the copies. This is the general law of the 'Association of ideas'; by which term, let it be remembered, nothing is here meant to be expressed but the order of occurrence." And, on p. 81: "Not that any power is supposed to reside in the antecedent over the consequent; suggesting and suggested mean only antecedent and consequent, with the additional idea that such order is not casual, but, to a certain degree, permanent."

But it is time that we heard Mr. Mill expound the other corner-stone of his philosophy, association of ideas. By means of this we shall see him create every primitive judgment, every à priori idea, every rational and intellective faculty, and all the powers of the will. In a word, his theory may be correctly described as a literal acceptance of the statement that man is "a bundle of habits." All his powers, intellectual and active, are resolved into certain habits of associating things; and so fully does he hold this, as to leave out

of the account the Being which is qualified by the habits; unless that be a "bundle of nerves." When we note how ideas follow each other in our consciousness. we perceive that they do not come at haphazard. As to sensations, it is the presence of objects which dictates their rise: but as to ideas, their order depends wholly upon the order of the sensations of which they are Sensations are actually in the mind, synchronously, or successively. Hence the ideas left by those sensations which were present synchronously, recur synchronously; and the ideas of those sensations which were felt successively, recur successively. whole law of association is summed up in this: that we always tend to have former processes repeated again as they first affected us. Other philosophers have followed Mr. Hume, in accounting the ties of association as not only previous coëxistence, or succession; but also, resemblance of ideas, or contrast, and cause and effect. Mr. Mill does not believe that contrast is any tie of association at all. He regards our association of resembling ideas as simply an instance of association by coëxistence. And he rebukes his own master, Mr. Hume, for enumerating cause and effect as a distinct kind of tie of association, because they both hold that cause is nothing but immediate and uniform antecedent: so that this species of association is nothing but an instance of association by previous succession. [We may mention, as a specimen of Mr. J. S. Mill's partial dissent from his father's system, that the son, instead of resolving association of resembling ideas into a case of association by coëxistence, does just the reverse: he considers every association by coëxistence as a case of resemblance. If the reader asks, what interest Mr. James Mill has in reducing our ties of association to the two of previous coëxistence and succession, a little reflection will show him. On the Sensualistic scheme, all à priori ideas and powers are to be gotten rid of. Hence.

the phenomena of association are to be reduced to the most mechanical terms possible. And especially are functions of comparison and primitive intuition to be denied, at the basis of association. But now, if an original tie of association is found in the resemblance of things, this must imply a comparing act, as in order to the perception of resemblance. For how can resemblance between two things be seen without comparing them? And does not an act of comparison imply, as à priori to its performance, a middle term, between the two things compared, namely, percipient mind? and must not this intelligent agent be regarded as endued beforehand with some subjective law of thought regulative of its comparing acts? This is as indisputable as that a pair of scales cannot go about the weighing of masses unless they have been furnished with a standard of weights. Here, then, we should have that thing so inadmissible to the Sensualistic philosophy, a reason endued with à priori principles of judgment. Wherefore it must be denied, per fas aut nefas, that one resembling thing can originally suggest the idea of what it resembles. So, if a cause should suggest its effect, not vet experienced in sequence; or an effect its cause, not previously seen in antecedence, we should have unavoidably another judgment hateful to the sensualistic thinker, a primitive intuition of cause and power. Hence the denial of these as original ties of association.

Two other remarks will complete the outline of Mr. Mill's doctrine of associated ideas. He attaches great importance to this assertion: that when trains of associated ideas somewhat long have frequently passed in the mind, the attention may become so engrossed by some of the more vivid ideas associated, that the mind takes less and less note of the less vivid intermediate links. This goes on, until at length, in passing these trains of ideas through the mind, some dimmer links

cease to be noted at all, or apparently drop out of consciousness. As links for bringing in the associated ideas, they were at first necessary: the train would not have passed to its completion without them. But the mind learns by practice to abridge its trains, or, so to speak, contract its associated processes, by skipping the unimpressive links, until the ordinary, careless thinker totally forgets how the associations were first formed. Hence, he is liable to misconceptions concerning the real source of conceptions and other complex trains, and falls into the blunders of the rational psychology, such as inventing à priori principles to account for certain judgments.

The other doctrine is, that ideas which are very frequently synchronous or successive in sensation, and hence also very frequently so in idea, come to be associated with a corresponding closeness. Ideas which represent sensations always synchronous or immediately successive, are at last so associated together, that the association appears necessary. This, according to Mr. Mill, is the explanation of all beliefs called necessary, by other philosophers, and of many illusions called a priori ideas.

To explain the manner in which association generates our mental processes, we must, says Mr. Mill, explain the nature of an expedient which human beings have adopted for their own convenience. This is language; which the author delights to characterize as the "naming" of ideas; and words he calls "marks" which we put upon our ideas. Two motives prompt men to name: One is the desire to communicate their mental states to their fellows; the other is the desire of having a help for themselves in associating and recalling and dealing with their own ideas. The inferiority of animals to man, Mr. Mill thinks, is due chiefly to their lack of concert and coöperation in their endeavors; and this, again, is the consequence of not having signs

by which to convey their feelings to their fellows. Hence we see the importance of this expedient of naming. All the parts of speech are names. Nouns are names of sensations, ideas, and clusters of ideas united by association, and of classes of clusters. Adjectives are marks put upon marks, to effect subdivisions among nouns. Verbs are adjectival words, expressing our sensations or ideas of actions. Predication is nothing but connecting a name with a name (or a mark with a mark) for the purpose of affirming, first the order in which we had the sensations named, and second, of affirming the equivalency of the mark predicated with the mark of the subject. Hence the extreme Nominalist conclusion is drawn which we saw in the hands of the French Sensualists; that propositions assert nothing but the identity of a name with a name; and deductive reasoning is nothing but a chain of mere verbal equivalents. The simplest thing which man can name by a noun, is a single sensation (or the idea which is the copy thereof), as light, heat, weight. Next, groups of sensations, which are always experienced together, come to be named, for the sake of abbreviation, by a single noun. For instance: we have, always synchronous, a sensation of heat, with one of light, upon the presence of certain antecedents. We call the object, fire. We have, always synchronously, a feeling of red, a feeling of fragrance, a feeling of figure, and a feeling of extension and weight. We call the cluster of antecedents to this cluster of sensations, rose. We say "fire," "rose," for short, as men say; and only for the sake of saving the trouble of naming over all the sensations. And the words, "fire," "rose," really mean nothing but the antecedents to these clusters of feelings. (Mill's definition of general terms is deferred until we speak of the proper notion of classification.)

Thus is insinuated, under this pretended explanation of the nature of concrete names, the rudimental error

'of Mill's system. This is the tacit denial of true substance. We are here taught, by an indirection, that there is no reality answering to our idea of substance: a doctrine which, as we shall see, ma be made to lead to the scepticism of Hume, the idealism of Berkeley, or the virtual nihilism of Hegel. But it is a doctrine necessary to the consistency of the Sensualistic philosophy. Recall its first principle: Nihil in intellectu, quod non prius in sensu. Remember, what all philosophy concedes: that it is only properties of bodies of which we have actual sense perception. Then, the Sensualist is bound to say, the mind has no business with any notion of the objective cause of sensations, except the notion of a cluster of properties. For, whence has the mind a right to the additional notion of a subjectum, or substance, underlying that cluster of properties? It has touched, smelt, tasted, heard, seen, only the properties: it must predicate nothing else. The rational psychologist answers: When sensation gives us the cluster of properties, the law of the reason, upon occasion thereof, intuitively and necessarily gives us the notion of the subjectum, the real being; of which the qualities cognized by sense must be properties. But that notion is à priori to sense-experience as to its source (though not as to the occasion of its rise), and the Sensualistic philosopher has been pleased to condemn such notions. Thus, Mr. Jas. Mill slyly suggests this verbal solution of the existence of this baseless belief in true substance. harbored by common sense. Association and naming do his work for him. As the sensations of red, sweet, round, etc., are always synchronous, when the cluster of antecedents called "rose," is present, so the ideas are inseparably associated. And the mind having invented the summary term "rose," for that cluster, in order to save itself the trouble of repeating a number of terms; this name and this cluster of sensations become indissolubly associated together, until the mind learns by

habit to think of something concrete under the name of "rose," and to attach necessity to it. In consistency with this analysis, the elder Mill says: Our sentient being is composed of points of consciousness. And the younger Mill, in his criticism upon Sir William Hamilton, says that the only notion which should be attached to matter is, that it is "a permanent possibility of sensation."

The next notion of the mind which Mr. Mill examines, is conception. We remember that in his system an idea is the copy or trace of a sensation. A concept, according to him, is a complex idea affecting the mind without the immediate antecedence of sensation. Departing from the established meaning of the term which by concept signifies some idea that the mind conceives, or produces out of itself from a seminal germ, he says a concept is a notion which takes several simple ideas together into a complex. This is evidently false nomenclature; for a simple idea in my mind, the blueness of the ocean, which I saw on a voyage, may now have the essential quality of a concept. This essential quality is, that the idea of blueness, once seen in the deep sea, is now of subjective origin in my mind. I see no water, no color of blue at this time, with my eves: the source of the idea is no longer objective. is true, that my mind was aided in raising the idea again out of itself, by the association of ideas. But its present source is subjective. With a percept I am affected from without. With a concept I affect myself. This subjective power is the very one which sensualism desires always to evade; for it is difficult to allow its existence and yet deny to it all regulative principles; and any regulative principle would be that thing so hateful to sensualism, an à priori law of thought. Hence Mill desires to suppress the subjective activity of the mind in conception. Hence he defines a conception as a complex idea. He wishes us to believe, that the rise

of a concept in the mind is nothing but the return of a train of associated ideas. When I conceive a horse, says he, I merely revive by association that train of sensations of color, figure, size, fourfootedness, etc., which I have so uniformly had synchronously. There is no real concrete being [as we come to imagine from the force of inseparable associations] cognized by the mind, when we think a horse; but only that cluster of simple ideas associated. Here again we have the baldest nominalism.

The next product of the associating faculty, according to Mr. Mill's scheme, is Imagination. As a conception is a single complex idea, so an image is a train of associated ideas. The author endeavors strenuously not to see that constructive or creative feature, which is the proper characteristic of every product of the imagination. For the peculiarity of the work of this faculty is. that the mind, acting as a free-agent, and for a purpose or end of its own, arranges its elemental concepts in connections which they never had in sensational experience. The professional man for a utilitarian end, the poet for an æsthetic end, sunders the previous association of elements of conception, and arranges them into new wholes. The former invents a new hypothesis; the latter a new picture. The elements never were associated in that order by any previous synchronism or succession in those minds: the new structure is a construction, a work of rational will. This essential feature of the power of imagination Mill weakly attempts to explain away. He intimates that the modification of structure is merely the result of the fading out of association of the links least interesting to the attention, in the previously associated chain of ideas. When, for instance, the sportive mind imagines as its military figure "a hog in armor," closely-knit links of association existed all the way along the chain from the swine to the armor. But now, the attention being drawn to the

ludicrous combination of the animal and the armor, all else fades out of consciousness. In reply to this pretended explanation, I ask, first: Could there have been a tie of association between the two, except by contrast? But Mr. Mill denies that this is a principle of association. Second: What is attention? It involves a function of volition. Thus, the constructive feature comes back into the process. The sensualistic analyst has a motive, here likewise, for falsifying the processes of imagination. If it is allowed to be the intentional work of a rational free-agent, then that agent must have, in its own reason, a principle of arrangement regulating the construction, independent of the previous associations by coëxistence, of the elements of conception. In a mechanical construction, the conception must precede the execution. In a process of imagination, the mind works with its own ideas, as its materials; and here. again, the plan must precede the construction, not follow it. But here, again, we meet that truth which Sensualism cannot tolerate; that minds may have à priori principles of thought. For, obviously, this form which volition impresses on the complex of ideas, is prior in cause to the result which is produced, and therefore it nust be something else than association.

Classification, according to Mr. James Mill, is an act of the mind which is purely one of association. We have seen how names are invented to assist the recovery of ideas by association. The same principle of mind associates the idea and its name, so that either suggests the other. The sole object of the mind, according to Mill, in classifying and inventing general names, is to save itself the trouble of repeating too many specific names. He says expressly that, if our memory were so strong as not to be encumbered by a multitude of specific names more than by a few, no general term would ever have been thought of. The process of forming a class begins, as he says, thus: A child has

applied the word "foot" to one of his extremities. It and the name mutually suggest each other. Seeing his other extremity along with the first, association applies the name "foot" to that also. Thus, an object and an object suggests a name ("foot") and its repeti-tion; and the word comes to stand henceforward, in his association, for two objects. Thus the class of "feet." The worthlessness of this process is disclosed by a single question: It is just as likely that the child saw his right foot at the same instant, with a play-thing resting against it, his rattle, say, as with his left foot. Why, then, was it impossible that association should make him apply the name "foot," in common, to one foot and the rattle? The radical element was lacking; resemblance: the rattle and the right foot are not related by resemblance, as are the right and left foot. This simple instance shows that it is not the convenience of saving repetitions, alone, which prompts us to invent and use general terms: but the reason distinguishes thereby the important perception of relations of resemblance. This Mr. J. S. Mill acknowledges, both in his note, correcting his father's analysis here, and in his "Logic." This unavoidable concession (as perhaps the astute father saw) ruins the cause of Sensualism. For we now have these facts: The mind, upon having sense-perception of two distinct objects: say, two human feet, also has, besides the two sensasations, a cognition of relation. Whence the latter? Either of the feet is visible and tangible; the relation is not. There, then, is a supersensuous cognition. Moreover, it proves that the mind has compared the two feet, while perceiving them by sensation. But this act is impossible, without the reason as a middle term, or comparing agent, between the two single ideas. Again, the reason refuses this cognition of relation to a multitude of pairs of objects, and only gives it to some pairs. It would not, in the child's case, give it to the foot and

the rattle, but would give it to the right foot and the left foot. At whose bidding? Not at the bidding of association; for the same occasion existed, in synchronous observation, in both cases. The reason, then, has a law of its own for judging relations; and this is prior in causation to the sensations. The student may easily extend this refutation to a number of similar false processes in the Sensualistic philosophy.

Mr. James Mill's method of resolving everything into association having been illustrated in these points, his remaining processes may be almost surmised by the reader. Abstraction is, with him, a somewhat different result of association and naming. We meet, among clusters of sensations, the same simple sensation recurring frequently, as the feeling of black color, in black man, black horse, black coat, etc. Frequent recurrence makes the association more vivid, and thus we are caused to note this quality, common to the black man, horse, and coat, more than other qualities. Wishing to name it apart from the clusters in which it recurs, we add the syllable, "ness," and make "blackness;" by which we signify no concrete thing that is black, but this quality taken out of all of them. The defect of this explanation is, that it leaves out the act of comparison, cognizing resemblance in the objects of the class, and the influence of voluntary attention upon our abstracting processes.

Memory, in this system, is nothing but a complex case of association. To prove this, Mr. Mill reminds us of the admitted fact, that ideas come into reminiscence always according to some tie of association, and that we always seek to impress ideas upon our memory by repeating their association frequently. But there is an essential feature in my reminiscence which always distinguishes it from other ideas arising by suggestion and sensation; and this is the assured belief that I have had that idea before. The idea is not only in conscious-

ness, but I know that it has been in my consciousness before. Thus, every act of memory involves my identity. my notion of successive time, and a belief that seems to be intuitive. Evidently, I cannot determine deductively the validity of the belief that this idea is the same that was before in my own consciousness; because there is no premise, except the belief itself, from which I can deduce. But Mr. Mill reduces our consciousness of our own identity to a mere result of an association between two consciousnesses immediately successive. He also reduces our notion of successive time to another result of a similar association. His attempted explanation of the belief in our own reminiscences is, then, as follows: When an idea is remembered, it comes because it is associated, probably through a number of links, with the sensation of which it is a "copy." That sensation, while it existed, was a point of our consciousness helping "to compose our sentient being." The next sensation or idea following it was, of course, associated therewith by the law of immediate succession. That idea was also "a point of consciousness," for the time being. The two together constituted our idea of self, which self-hood, thus generated, is also associated with the first idea. So, when the reminiscence recurs, constituting again the feeling of identity, it is because the mind has rapidly run through all the intervening associations between the first impression and the last recollection of it, carrying back the idea of self-hood which is produced between every pair of links in this chain of points of consciousness. Mr. Mill admits that this process is complicated, but claims that it is of undoubted correctness!

Belief is, with Mr. Mill, only a case of inseparable associations. What others regard as necessary beliefs, he explains as simply judgments of invariability in the associations experienced. Belief of propositions is, with him, simply a recognition of the fact that the predicate

names the same thing which the subject names. Of axiomatic belief, his system knows nothing; all is empirical, and the result of force of association.

Those rational notions which other philosophers call à priori, he accounts for much after the fashion of Locke. We have seen that he regards our idea of duration as simply the result of an observed succession in our own consciousnesses. As impression follows impression, the relation of past, present, or future arises simply as an association. Combine these three (by association again), and the three abstracts, "pastness, presentness, and futureness," literally compose our whole idea of duration. Time, then, is this threefold abstraction, with the matter of the events dropped out. Space is but the idea of extension which we derive from a muscular sense, emptied by abstraction of its accompanying feeling of resistance. The infinite is, with him, simply the indefinite; or, in other words, the idea of an aggregate, with the idea of still another increment as possible, associated with it. The cause is nothing more than the immediate invariable antecedent, and what we call the necessary idea of power in the cause, is only an expression for our inability to separate in thought an association between a pair of phenomena which has become inseparable by constant recurrence together. Our belief in our own mental identity is, with Mr. Mill, also a result of experienced impressions indissolubly associated. The only difference between his belief in his own identity and that of another object is, that in the first case the data of association are given by consciousness, and in the second by observation. That is, a man does not know that his mind is the same any otherwise than he knows that the stone is the same upon which he daily steps into his home! When we remember how J. S. Mill has rigidly carried out his father's principles to the definition of the stone as nothing more than "a permanent possibility of sensations," we shall appreciate how near this system comes to nihilism.

Mr. Mill's theory of man's active powers is built upon the same law of association, with the assistance of another sensuous fact. Among our sensations, some are immediately pleasurable, and some painful. By the law of co-existence, the pleasure or the pain is, of course. associated with the idea of the impression. Here we have the key to the whole system of human emotions and volitions. The remembered idea of an impression which was pleasurable when experienced, differs from the impression itself, in that the pleasure is only an idea remembered, instead of an existing pleasure. This idea of the pleasure, as associated with the idea of the object which was the cause of the pleasurable impression, is desire. So the remembered pain, as associated with the idea of its cause, is aversion. In like manner. fear and hope are explained, with all the other affections.

We observe experimentally, that some acts done by ourselves are attended by pleasure, or, what is practically the same thing, the avoidance of pain. Now the idea of experienced pleasure (associated with that of the cause), is desire. So the idea of experienced pleasure associated with the idea of our own act causing it. is motive to volition. The volition always follows the stronger motive. Which shall be the stronger motive depends upon two things. One is the relative vividness of the pleasure naturally attending the sensation; the other is the intimacy of the association between the act and the pleasure, resulting from frequent repetition. Hence, it follows that moral education consists simply in establishing desirable associations between acts and consequences, by the frequent repetition of the right acts. Disposition, also, is nothing but habit. The disposition to a given volition is no more than the tendency to recall the motive to it, and to feel it the stronger motive, arising from frequent association of the execution of that volition and the pleasure.

In the same facile way Mr. Mill explains all the actions of taste and ideas and emotions of sublimity and beauty, without introducing any other æsthetic principles than sensuous pleasures and pains. Associations do the whole work of taste, by representing to us objects or ideas which once caused, or can cause, certain kinds of pleasure. Those ideas or objects which suggest these pleasures raise the idea of beauty or sublimity.

We are now prepared to understand Mill's theory of the will. All men regard volition as cause, and the muscular movements of our own members as next effects thereof. Hence, the natural way to approach the inquiry into the nature of the will, is to examine the rise of our muscular movements. We find then, first, that muscular movements are often produced automatically, by sensations; as when a certain feeling in the nerves of the nostrils contract the diaphragm and produce sneezing, or the flashing of a bright body before the eyes causes involuntary winking. Now, ideas are copies of sensations; whence we learn that ideas. also, may direct the muscular motions of the members: as when thoughts cause men to move or gesticulate involuntarily. We are thus led to attribute all voluntary movements to ideas in the form of motives. A motive is nothing, as he supposes, save the pleasure attending a certain impression associated with an act of our own as cause, or immediate antecedent. Now, a volition, when regarded as a mental act, and distinguished from the muscular, is nothing but motive dominant. It is not correct to say that motive leads to volition, motive is volition whenever the association of pleasure with the conceived action is strong enough to engross the mind. After all, then, it is ideas which move the muscles; and every case of volition, however conscious, is obviously regarded by Mill as virtually automatic, like that of the unconscious winking or gest-

ure: save that the idea which immediately moves the muscles is also known in consciousness. But one may ask, if ideas of actions and resultant pleasures associated immediately move the muscles, does not the will exercise a self-determination over the rise of the ideas? No. says Mr. Mill. The advocates of self-determination know that we cannot directly will an idea into recollection; because volition implies that the object thereof must be already in the consciousness. Hence, ideas must come as the laws of suggestion bring them. These philosophers suppose, however, that the power of attention modifies the suggestions, by brightening the ties leading on to the desiderated ideas. But Mill supposes that he has banished volition wholly from the mental phenomenon of attention, by asserting that the only cause that can give brightness, prominency, or permanency to any suggestive tie, is the pleasurableness of the objective idea, and not the subjective power of the mind. Thus, all real free-agency is hunted from the last restingplace in the human soul. As in the original scheme of Hobbes, the soul is the helpless slave of outward impressions and of habits. The objective inducement is confounded with motive, motive is confounded with volition. The soul's seeming act of choice is described as being just as purely the automatic, physical result of the impressions given from without in sensation and association, as is the pain of a blow of the impact of the bludgeon. How can this system be redeemed from a stark fatalism which would reduce man's free-agency to a cheating illusion? Mr. J. S. Mill, in the conclusion of his "Logic," gives us this evasion, borrowed from a brief suggestion of his father. If the relation of cause and effect were what we believed it, a tie of efficient power between the immediate antecedent and its consequent, and if volitions were in that sense caused, then, says J. S. Mill, the necessitarian system would be unavoidable. But the mind is not entitled to any such

intuition as that of power in the cause. The true doctrine of causation is, that the cause is merely the immediate invariable antecedent. There is no foundation for any notion of necessity in a cause, except the unbroken uniformity of the association. By this way, he thinks he escapes the iron result of fatalism. Having, by one philosophical heresy, robbed man of his free-agency, he endeavors to restore it by another.

The way is now prepared to understand the moral theory of the Mills. Mr. James Mill sums up all virtues under four heads: prudence, fortitude, justice, and benevolence. The first two are duties to ourselves, the last two to our neighbors. The only motives which this system knows are the ideas of pleasure or pain as associated with acts, the causes thereof. Experience teaches us that some acts directly cause pleasure to ourselves or prevent pain, while others cause pain or prevent pleasure. These two classes are the good and the evil. The natural desire of good teaches us to seek the one and avoid the other. Hence, nothing is needed but experience and association to form the habit of considering beforehand how acts will effect our enjoyment. The habit of thus considering is the virtue of prudence. Experience also teaches that some acts which are at first pleasurable, result in a greater ultimate pain; and some, which are at first painful, yet cause a greater ultimate pleasure. Association, by the aid of habit, again couples the greater pleasure with the act at first unpleasant; and the vivid presence and influence of that association becomes the virtue of fortitude, including self-denial.

It is by association, also, that the pleasures and pains of others become agreeable or disagreeable to us. They remind us of our own pleasures. It is pleasant to us to see others' pleasures, simply because, by suggestion, they remind us of our own. Thus, all acts of justice and benevolence, the nature of which is to be promotive

or conservative of others' pleasures, come into the category of the good things. It is the same association which generates that pleasant sentiment called approbation. When we are spectators of acts of benevolence or justice, the spectacle is pleasing, simply because the advantage done in them to others is associated with our own similar advantage. That pleasure is our approbation for others' good deeds. When we do acts of justice and benevolence to others, association also remindo us of their approbation towards us as generated in the same way. And this is the account of our moral sentiments given by this philosophy. I only remark here, in order to indicate its defects, that it is radically a selfish system, resolving the whole idea of good into mere advantage; that it mutilates the definition of virtue by omitting classes of righteous principles of essential importance, such as truth, godliness, and disinterestedness; that it utterly fails even to conceive the true nature of the moral motive; and that, with the real problem of the nature of moral obligation, the intuitive imperative of conscience, it does not even pretend to grapple.

Such is a brief, but I believe a faithful sketch of a most influential system, which may be correctly named *Philosophia Milliana*, and which has been taught by the father and son with great and disastrous effect since 1829. This is the date of the appearance of Jas. Mill's Analysis. In several respects, the son, J. S. Mill, has recoiled, in his Logic, and other works, from the bold and hardy consistency of the father's errors. The son does not attempt to build a system of logic upon the father's ultra-nominalism. He does not, like James Mill, attempt to construct generalizations without comparison. He is perspicacious enough to recoil from the absurdity of a memory without a judgment of self-identity à priori to it. But still J. S. Mill is doubtless to be held, in the main, a Sensualistic thinker. Even in

his Logic, which need not have led him into such questions, he commits himself to the distinctive principles of that system. He denies, for instance, that the mind has any valid cognition of substance, because it obviously has not sense-perception of it. He adopts the vicious theory of causation, making it nothing more than constant, immediate sequence. He denies that any intuitive judgments are axiomatic. He recognizes no propositions as established, save those which are established empirically.

The most of my criticisms upon the system of the Mills will be deferred, until other forms of the Sensualistic philosophy are traced, and we are thus prepared to refute them together. A few remarks are now offered upon some points of this Analysis of the mind, such as are either especially appropriate to it, or convenient at this stage.

The scheme of Mill, like that of Hartley, of which it borrows its main points, deserves to be called the philosophy of association. Beginning with the two mental functions of sensation and ideas (the copies of sensations), Mill constructs every power of the mind from these, by processes of association, with the act of "naming," which is, according to him, an expedient of the associative faculty. It may be said that he strips the mind of all original faculties, except the two of sensation and association. Now the laws of association are most important, and they doubtless combine with and modify the other faculties, both intellectual and active, in very interesting modes. Mill, like Hartlev. calls our attention to many instructive facts and traits of suggestion. But it is a sheer delusion to attempt to construct the powers of the mind wholly out of a single accident qualifying it. The original principles of the soul are doubtless susceptible of this law of habit, called association, the simplest expression for which is, the tendency of the soul to repeat its own

operations. But must there not be powers to operate, in order that they may experience this law of habit? The question is, What are those original powers? As in mechanics or physics, a force must exist, in order to become the subject of any regular method; so in psychology, the faculty must be given, in the mind, in order to come under this mental habitude called suggestion, or association. This principle simply repeats, it does not create. It connects what has been produced by other faculties; thus providing for the preservation, ordering, and reproduction of these stores.

The chief illusion of Mr. Mill is his doctrine of inseparable association. This error is indeed the cornerstone of his structure. Ideas, he thinks, become so connected by constant, synchronous, or successive occurrence in the mind, that their association becomes indissoluble, without any other ground for that result. This is his solution for all necessary truths. The only reason why we cannot help thinking a concrete substance in the rose, for instance, is the fact that the sensations of color, form, and fragrance, which we call properties of that substance, have been so constantly seen, smelled, and handled together, that their association has become inseparable. The only reason why the mind seems necessitated to think of a given effect as arising out of the power of its proper cause, is, that we have so uniformly experienced the two phenomena in sequence, that we cannot possibly separate them from association in thought. If this doctrine of inseparable association is baseless, Mill's whole system falls into ruins. But the refutation of the doctrine is found in two familiar facts, either of which is fatal to it. First: oftentimes, the most inseparable associations are generated without frequent concurrences of the ideas. yea, by one single instance. The traveler experiences. once in his life only, the disastrous effects on his health of eating the manioc (or Mandioca) root of tropical

America. He had used it without expressing the poisonous juice. Afterwards he sees others eat it, when properly prepared, and eats it himself a thousand times with impunity and benefit. Yet to the day of his death, he can never think of those torments of body, without connecting them with that root as cause. How came this, which Mr. Mill would call inseparable association, without repetition? Again, multitudes of instances exist in which our ideas have been universally connected in a certain way, without a single experienced variation, and yet the separation of the two ideas invariably associated hitherto is perfectly easy. The citizen of tropical America had never, in all his life, seen, felt, or tasted water, except in the liquid state-But it is perfectly easy for him to accept authentic testimony which assures him that in the frigid regions men walk and ride on water solidified. The rustic has never seen a human figure, except as formed of flesh. The moment he sees a marble statue, he comprehends, with perfect facility, the nature of the object. It thus appears again, that invariable association of ideas has begotten no necessary judgment whatever. The lesson which we derive from these instances is, that there is something deeper than mere association, at the root of such truths. What is it? An intuition, which, however given in the mind upon occasion of our experience of certain impressions, is yet independent thereof for its validity. We refer properties to substance, effect to cause, not because the ideas happen to have always risen together; but because there is a reason in the laws of the mind itself, why they must rise together.

Having exposed this common error of Mill's analysis, I proceed to point out some specific ones: selecting such as illustrate, by their refutation, important truths of philosophy. First, it is instructive to see in the Mills, how the most objective, and, as they boasted, the most experimental of theories, by adopting the proton-

pseudos of sensualism, has reached the extreme result of idealism. The mind, says Mill, is entitled to no cognitions save those which come from sensation. Hence. we may admit objective properties, but not objective substances. We are conscious of impressions and ideas which are copies thereof; but we are not directly conscious of spirit. Therefore, we must define our sentient being as "composed of points of consciousness:" and what the world calls objective matter, as only "a permanent possibility of sensation." Thus mind and matter both vanish into two trains of impressions. But the reason now insists upon this question: Impressions upon what? Upon an objective reality? According to Mill, No. Upon a subjective reality? Again he must say, No. Where, then, are we left? Again: if consciousness tells us that we cannot know real substance apart from its properties, she tells us as absolutely, that we cannot know properties, save as the properties of a subjectum. The two cognitions are bound together in an adamantine relation by the very necessity of our form of thought. If we think either substance or property, we are obliged to think them thus. So that if our cognition of subject is invalid, a valid cognition of properties is also impossible. Where, then, are we left? Without either real object, real subject, or any real cognition; on the dreary coast of that ocean of Nihilism to which the idealism of Hegel passed, and in which the empirical philosophy of Hume perished in the blank of universal scepticism. No better proof of the falsehood of Mr. Jas. Mill's analysis can be presented, than that it led his son to a definition of the objective so preposterous and self-contradictory. It is only "a permanent possibility of sensations" for us. But if the reason has any judgment from any source, it is that permanency only belongs to real being. For what is permanency but perfect continuity of being? That which is only in posse cannot have permanency: there

is yet nothing to subsist in continuity. The very fact that our experience shows us the objective as a permanent cause of impressions upon our consciousness, is a sufficient proof that the objective is real.

In the third place, I would show you, that upon this theory of the mind, knowledge would be impossible. The Mills define sensation as simple feeling; and the ideas which are copies of the sensations, are also feel ings. Vol. I., p. 224: "Sensations and Ideas are both feelings. When we have a sensation, we feel, or have a feeling: when we have an idea, we feel, or have a feeling." Note, again, that they define consciousness as a generic name for all the feelings with which the mind is affected, and identical with them. See pp. 224-226. Mill here repeats with unmistakable clearness that, as the words, "We have a sensation: have an idea:" mean only, "we feel;" so, to be conscious of a sensation, or an idea, means precisely the same thing. The only difference between consciousness and the other terms, sensation, thought, desire, etc., is, that consciousness is the general name, describing the whole class, of which these other names are sub-divisions. The school of Mill, Prof. Bain, and J. S. Mill, while quoting Hamilton, yet repudiate his definition of consciousness, as the "condition" of our mental operations, or as "the recognition by the mind, or ego, of its own acts and affections." According to Mill and his school, consciousness, being identical with sensations and ideas, which are feelings simply, is itself simply a feeling. This unavoidable conclusion they expressly accept.

Now, then: how does any veritable cognition ever come into the mind? Every person recognizes a radical difference between feeling and knowing. The difference is closely analogous to that between caloric and light. From illuminated bodies, they usually come together; heat in light. But from a black iron stove, caloric comes alone; and it is dark. So, if feeling could

come without cognition, it would bring no idea; it would be dark. How, then, with a consciousness which is only feeling, and mental states which, in their rudiments, are also feelings only; how does any intelligence ever dawn in man? The truth is, an intelligent consciousness, a consciousness which is originally something more than feeling, is the necessary condition of feeling itself. As in the solar rays, the caloric comes in the light; so in man's soul, feeling comes in, or by means of knowing. Hence it is clear that Mill's system, in reducing both mental affections and consciousness to feelings, would make intelligence impossible. A man may have an idea of a simple feeling: he may have an idea of the pain which last week affected his nerves. This fact seems to have deceived Mr. Mill: he would reason from it; if we have an idea of our past pain, what other source is there for this cognition than the feeling? Then simple feeling may give knowledge. I reply: there is no other objective source; but there is another subjective source, namely, an intelligent (not a mere sentient) consciousness of the past affection, given back to us in memory. Deny this, and an idea of a pain is as impossible as an idea of abstractions would

The truth is, that consciousness is not a feeling, but an intellection. It is purely an intellection, as the faculty itself tells us; and therein is its grand characteristic; its total difference from feelings and volitions. It is this fact, that every act of consciousness is, in its rudiment, purely and solely an intellection as opposed to a feeling, which is the very condition of human intelligence. That consciousness is always an intellection (even when the mental modification referred by the ego to itself is a feeling), is well stated by Hamilton, amidst the inconsistencies into which he is plunged by his persistent effort to criticize Reid's doctrine concerning consciousness. Let us turn aside here, to correct these

errors. The essence of Reid's view is that consciousness is an intuitive faculty, the acts of which usually attend all the operations of all other powers of soul, giving us the cognition that they are modifications of the self, or ego. Hamilton, after virtually adopting this view, as is unavoidable to him who fairly observes his own mind, modifies it in a certain degree, in the erroneous direction of the Mills; arguing at great length, that all our "special faculties of knowledge are only modifications of consciousness." (Lect. 12). There is a sense in which Reid's view includes this statement, viz.: that all our "special faculties," not only of knowledge, but of feeling, operate usually in and under consciousness; and that it is only when they do this, that they furnish any materials of knowledge to us. But Hamilton seems to claim more; virtually to identify consciousness and all our special faculties of knowledge. This is an error. First, because we are conscious of feelings as immediately as of thoughts. If consciousness is the same modification of mind with that modification which is its object, then, in this case, consciousness is a feeling. But Hamilton admits that consciousness is always an intellection. It is true, that he is more cautious than the Sensualistic school, limiting his identification of consciousness, so as to make it the same with our "special faculties of knowledge" only. But this is a plain inconsistency. For how do we become aware of our feelings? Only by consciousness. To be consistent, he should include all our special faculties of feeling also under consciousness, as Mill does. Second. Hamilton teaches (and illustrates with unusual perspicuity) the fact that the mind is affected with modifications which are out of consciousness. But if consciousness is coincident with all those modifications, this is a contradiction. If, for instance, perception is only a mode of consciousness; to have a perception and not be conscious of it, is as clearly absurd as to have an unfelt feeling (which even Mill gives up as a contradiction.)

But to return: we have seen that upon Mill's analysis, cognition would be impossible; we might have impressions, but no sense-perceptions, no ideas. And I call your attention to this result, in order to show how inevitably the sensualist misunderstands (as he must) the real nature of perception. Leaving the conscious, that is, the intelligent ego, out of his analysis, he renders ideas impossible. Let me quote here an instructive passage from Cousin's criticism of the parallel attempt of Condillac: "In order that the feeling may be transformed into sense-perceptions, the action of an internal agent must correspond and be joined to that of the exterior forces; from that double action springs sense-perception. Suppress the action of the objects, there is no feeling, and the sense-perception is impossible. Suppress, on the other hand, a certain action of the ego (which it is not just now our business to determine) and there is feeling, but not sense-perception. not be otherwise. In fact, that which characterizes perception and distinguishes it from feeling, is that the ego has consciousness of it. That must be well understood. It is the knot of the difficulty. It is the very point of the question. Either there is a sense-perception, or there is not. If there is, it is felt, it is perceived; the subject who experiences it has consciousness of it. If not, there is no sense-perception; or if one will use the word sensation, it signifies only an impression not felt, not perceived, and without consciousness. Now, I say, that what the object produces is not perception -a phenomenon in reality very complex - it is only feeling."

To get an idea from this mere impression on sensibility, we must invoke consciousness, the à priori, innate, fundamental faculty of intelligence. It is only as consciousness refers the impression to self, intelligent sub-

ject, that idea arises. Without this subjective act of intelligence, there would be only feeling, in the dark. With it, there is light. The intelligence, conscious of its own modification in sensation, and conscious that it is not self caused by a volition from within, is necessitated by its own original, rational law to impute this effect felt in consciousness to an outward cause: and that, a cause which has real being. This rational law is no other than that which necessitates our inferring an efficient cause for every change; the great constitutive norm of the human reason. There is thus, at the root of every sense-perception, a judgment; and tothis judgment intelligent self contributes the essential part. Thus we see that Mill explains the simple by the complex. He regards judgment as the complex result of associated sensations; whereas the true philosophy makes judgment the rudimental act of intelligence, universally present as an element in all its varied processes. It is this judgment which at once, and in the same act, refers sensation to conscious self as subject, and to really existent object as cause, which gives us perception. Thus we explain the rise of ideas in the mind out of mere impressions, and the conviction of the reality of the external world; and we are guided safely between sensualism on the one hand, and idealism on the other.

When we pass from perception to conception, we find in the theory criticised a similar error. Mr. Mill perpetually describes ideas as "copies of our sensations." When an idea re-appears in conception without the original sensation again present, how are we to know that it appears unchanged? The true answer is, that the intuitive power of memory here comes in, verifying to us by comparison between the present and the past intellections of the idea, its unchanged truth. But of this, the only possible solution, these philosophers cannot avail themselves, because they hold that

memory is itself a result of association between ideas in conception. The effect cannot be called upon to assist in the creation of its own cause.

The inadequacy of the Sensualistic philosophy may also be illustrated by the defects of its theory of language. The main features of that theory we have seen re-appearing in all the writers criticised; in Condillac and Helvetius, and now more perspicuously stated by Mill. Language, according to him, is an expedient which man invents at the prompting of two wants: the need of communicating his ideas to others, and the desire to preserve and reproduce them more conveniently for his own mind. The sign once invented, association does all the rest in connecting it with the idea. All the modifications of language are also the work of this protean faculty. Association makes general names; man's motive being simply to save himself the trouble of repeating so many particular ones; that is, he learns to say "army," for instance, simply because it is inconvenient to repeat the muster-roll every time he has occasion to indicate it. Adjectival words are applied only to divide classes; as when we form the two subclasses in the general class, "men," by saying "tall men," "short men." Predication, instead of being an expression of a mental judgment, is merely an expression of this fact: that the predicate is a mark of the same idea which the subject marks. Now, upon this theory of language it can never be explained why the animals have not languages. They can utter sounds; and they can surpass man far in the language of pantomime, which comes as fully within Mr. Mill's definition, "marks of ideas," as do articulate words themselves. The animals certainly feel one of the motives which he supposes have prompted men to form languages, the desire to communicate their impressions to their fellows. The ideas of the animals are certainly connected by association; and they obviously have a certain kind of

memory. Why, then, have they not, like man, constructed a methodical language; why have they not, in addition to their expressive signs, a syntax? The pretended answer is: Because they lack the material organs for articulation and syllabication. But this is an insufficient answer. For first, if the lack really existed, it could, by itself, only prevent a great multiplication of signs or marks of their ideas; and the question would recur, why have not the animals connected the signs which are actually possessed by them (which are not a few) into a syntax, and thus formed, at least, a limited language, like those of savages? And second, is it true that the animals lack the material organs for syllabication? They have all that man's body has: lungs, wind-pipe, larynx, vocal cords, tongue, teeth, palate, lips. Is not the reason why beasts never utter a true consonant, to be sought rather in their spirits than in their mouths? This question leads us to a true theory of language. Man, in inventing and methodizing these signs of his thoughts and feelings, employs, à priori, subjective powers of reason, which the spirit of the beast does not possess. The reason why the latter never divides his signs into "parts of speech," and digests a syntax, is, that he has no rational powers of construing his impressions in his own consciousness. His spirit is, in fact, very much what the Sensualistic philosophy would make man's spirit, a mere sentient centre of successive impressions, which are associated, expressed, and partially remembered; but never construed in the reason, into categories. And the reason why man is gifted with "discourse of reason," is, that his spirit is not what the Sensualistic philosophy would make it. The brute is impelled by instinct to utter those sounds which express his impressions. An instinctive species of association possibly causes him to repeat them when the impressions recur. But man names objects and ideas, of set purpose, in the exercise

of rational volition. He then forms classes by the exercise of the rational faculty of comparison. His adjectives are not mere expedients to sub-divide his general classes; but logical attributions of quality to its subject.

Other and graver errors of this system will be exposed at a later stage, in common with those of subsequent advocates of the Sensualistic philosophy.

CHAPTER IV.

SENSUALISTIC ETHICS IN GREAT BRITAIN.

THE moral sentiments of man, as has been indicated. afford us a capital test, both of the pretended truth and value of the Sensualistic philosophy. The undisputed facts are these: that we have certain judgments and feelings, which are called, by common consent, moral or ethical; and the very fact, that mankind gives them distinct names, shows that they are popularly supposed to form a class separate from our other perceptions and judgments. We speak of certain acts of rational agents as right or wrong. We ascribe to these merit or demerit. We think them deserving of reward or punishment. We speak of obligation to do the one sort and refrain from the other. We express a vivid approbation of the right, and disapprobation for the wrong acts. Especially when we are ourselves the agents of them, we feel sometimes remorse in view of our wrong acts, and a vivid peace and satisfaction in view of our right acts. We judge that we and our fellows have, in certain cases, a peculiar kind of claim, which we call our right, which we think to be a moral title fortified by obligation, to certain things or a certain treatment. It is manifest that the common element of all these judgments is the apparent distinction between right and wrong. For, it is the right act which is meritorious; which earns reward; which answers obligation; which wins love; which, seen in ourselves, gives satisfaction of conscience: which fulfills the claim of right of our fellow. What is the nature of that distinction?

We talk of conscience, as what perceives it. Is conscience a faculty, or merely a complex artificial function? It is in the answer to these radical questions that we apply a crucial test to our philosophy.

Obviously, this moral distinction is not sensuous. Virtue is neither a primary nor a secondary property of material bodies. Obviously it is not such an attribute as can be perceived by sight (like color), or touch (like smoothness), or hearing (like harmony), or taste (like sugar), or smell (like fragrance). If men call it tropically, a sweetness, or harmony, or brightness, they know that it is only so metaphorically. Literally, no man has sense-perception of it. Now, then, if the great maxim of the Sensualistic philosophy is true, nihil in intellectu quod non prius in sensu; our souls have no such original rational function as conscience. Conscience must be a complex or an artificial result of other, simpler powers of the soul. If men think it original, they must deceive themselves, as they do in imagining that they directly see relative distances or relative magnitudes of visual objects; when, as Bishop Berkeley has taught us, they are only making a rapid and facile interpretation of certain primary sensations of extension, shade, etc. The great frequency of the process makes them cease to notice the parts of the association. So, habit and association construct what we call the functions of conscience, out of our natural perceptions and feelings, in some mode or other, and we have forgotten the real process, in our familiarity with the result. And last: as mankind popularly suppose that they have an original judgment of a moral distinction, it is logically incumbent on the Sensualist to show some process by which the illusion has grown out of simpler elements, if he can!

The student has seen how these philosophers in the seventeenth and eighteenth centuries recognized this task, and how they attempted to comply with it. On

their principle, there was nothing else for them to do. We have seen how Hobbes, whose giant and ruthless tread broke the way for all of them, undertook to accomplish the task, by reducing all moral sentiments to simple, instinctive selfishness, acting upon the ultimate and simple fact of sensation, that some impressions are pleasurable and some painful. Thus, with him, the moral good is identical with natural pleasure. Pleasure is the only rational end. Self-love, directed to pleasure, is the whole moral motive. The laws devised by Leviathan (the autocratic Imperium), and accepted by the community as the necessary expedient for ending the intolerable anarchy of the "state of nature;" these laws originate all moral distinction. Here we have the Epicurean ethics revived in the baldest form. Even the pious Locke is driven by the Sensualistic creed to accept this scheme in its chief principle: that the distinction of good and evil is, in rudiment, no other than that of pleasure and pain. When his philosophy was transplanted into France, Hobbes' conclusions were yet more fully revived by Condillac, and pursued to their most loathsome results by the impudence of Helvetius.

Returning now to Great Britain, we see the later Sensualistic philosophers pursuing the same fated course. Hume presents us what is virtually the same analysis, in his utilitarian ethics. What men call the virtuous, says he, is simply what experience has shown to be, on the whole, the useful. When we say, "we approve the virtuous," this is simply a result of association, combining the pleasure experienced from the utility, with the idea of the action which causes it. Thus, in experience and association, we have all the elements, as he thinks, to account for our seeming judgments of obligation, merit, and right. This is still, as we shall show in its place, a selfish system.

Dr. Palev, the philosopher of the clerical devotees of

the Sensualistic philosophy, proceeding from the same starting-point, presents us with a religious, utilitarian, or selfish system. Virtue, according to his definition, is "the doing good to mankind, in obedience to the will of God, and for the sake of everlasting happiness." Obligation, with him, is "a forcible motive arising from the will of another." The distinctive quality of the virtuous act is, according to him, again, its utility. The rule of distinction, instead of being the imperfect experience of the natural man (as with Hume), is God's wise will. The motive is still simple selfishness; but selfishness enlightened by a revealed immortality and its rewards and punishments.

Bentham presented a slight modification of the Utilitarian scheme of Hume, in assigning the "greatest good of the greatest number,"* as the moral end. There was, in his theory, a certain sound of patriotism, equity, and benevolence, which rendered his speculations very attractive to many ingenious minds. To him who looks at the subject of morals only from the point of view of the human legislator, there is much of plausibility in Bentham. His practical rule of life was summed up in the favorite maxim, "Minimize the evil." The largest resultant aggregate of advantage is so often the practical end of the legislator and magistrate, and an enlightened and beneficent expediency is so often his guide, that many supposed they had found in this maxim the fundamental truth of morals. The acute Utilitarian can also explain, upon his principles, many of the rules of public and social morality. But the theory, like the more obviously selfish system, confounds natural with moral good, and advantage with the moral motive. If the question be asked: why is it always virtuous to "seek the greatest good of the greatest number?" no other answer can be given, than that this

^{*} He doubtless borrowed it from Beccaria.

good is man's properest end at all times. Why the greatest good of the greatest number, instead of the greatest good of the worthiest? It can only be because, again, natural good is the exclusive rational end of man; so exclusively so, that it is to attract the right reason by its mere mass, as matter attracts matter. By this theory, aggregate humanity is made our supreme end again; and this assigns self-interest as, the ultimate motive of all moral action. For the agent cannot forget that he is an integer of that aggregate, and therefore the principle on which the virtuous action is required—that of the self-interest of the mass—must also be the principle upon which it is rendered.

Very near akin to this, again, is the theory of morals known as the benevolence scheme. This identifies virtue with the love of beneficence, (making no recognition of the love of moral complacency as a distinct species of the affection). According to this scheme, benevolence is the one virtue, inclusive of all others. That which makes sin odious, and ill-deserving, and punishable by justice, is simply its mischievousness. The merit of virtue is simply in its beneficence. The rational ground of rewards and punishments is to be found in the politic tendency of these sanctions to "minimize" the mischiefs which sin naturally tends to inflict upon the welfare of man. This theory wears, at the first aspect, an air of peculiar amiability and disinterestedness. Its advocates advanced it as the opposite of the selfish system; for does it not propose our fellowcreature, and not self, as the object of the all-including virtue? And what can be more disinterested than benevolence? Hence many divines gave into this scheme; especially of those who had imbibed the optimistic opinions of Leibnitz and the reasonings of Grotius on Christ's Satisfaction. It was naturalized in parts of America by the Hopkinsian school and their founder, Dr. Samuel Hopkins, of New England. The

clerical advocates of the benevolence scheme could not fail to make the plausible claim, that the Scriptures themselves are founded on it, inasmuch as they represent love as "the fulfilling of the law," and define God's own nature as love. Yet its affinities with the selfish system are obvious to a little reflection. Why should one desire to analyze the ultimate idea of the virtuous into anything but the virtuous, except at the bidding of that sensualistic maxim, which can admit no original sources of man's judgments and affections, save the sensitive? Why is benevolence the sum of all virtue? Because it is beneficent, these philosophers answer. Its moral value, then, is solely in the fact that it promotes well-being; and we are thus led back to the old sensualistic analysis, which recognizes no other original quality in acts than their pleasurableness or painfulness as the standard of their moral quality. Thus, again, moral good is identified with natural good. equally easy to show that self-interest lies at the root of the moral motive upon this scheme. If virtue is nothing but benevolence, and acts are obligatory only because they confer natural good, then it is the plainest thing in the world that whenever I prefer my moral claim of right upon a fellow-creature, my desire of natural good is my valid reason for doing so; that is, my self-interest. Thus we reach the conclusion that my self-interest grounds my moral right. So must it reciprocally ground my neighbor's moral right on me. What is this but to reduce the interchange of virtuous offices into the traffic of self-interest?

Dr. Thomas Brown, in his treatise on Cause and Effect, besides other features of his philosophy, betrays a certain remainder of bondage to the Sensualistic philosophy. His theory of the moral distinction contains the same. It is true that in his eloquent lectures he attacks the selfish systems with vigor, and utters many noble and elevating sentiments touching duty

and virtue, for which he deserves the thanks of all the good. Yet, in his final analysis, he reduces virtue to a generic expression for a certain class of sensibilities. With him, the affections or feelings of approbation and disapprobation are the rudimental fact; and he regards them as simply the instinctive impressions upon a sensibility. Certain acts impress us immediately with the peculiar pleasure called approbation; certain others, with the instinctive pain called disapprobation. It is as when the visual perception of an azure tint gives instinctive pleasure to the sense. The soul, recognizing in its experiences these two classes of impressions on its sensibility, connects them by association with the acts which cause them, and colligates these into two classes. The virtuous acts are simply that class which affect this peculiar sensibility pleasurably; the vicious are that class which affect it disagreeably. This account of the moral distinction differs from the correct one in one important respect, that it refuses to find, as we do, the source of the distinction in a primitive judgment of the reason. Instead of making the acts of conscience primarily such a judgment, and secondarily a peculiar emotion, Dr. Brown makes them primarily an impression made from without on the distinctive sensibility, and secondarily a reference of acts to classes, by the associating faculty. Why should he thus depart from the analogies of sound philosophy? If we may surmise from the parallel speculation upon cause and effect, it was because his mind was too much tinctured with the Sensualistic principles, to be entirely freed from the prejudice against à priori laws of the reason. His scheme is thus, obviously, a sentimental, as distinguished from a rational scheme of ethics: and it is better entitled to that name than the theory of Adam Smith, which he successfully exposes.

After we have completed our grouping of the essential points of the erroneous philosophy by this historical

review, we shall be better prepared to deal with the refutation of the ethical theories above stated.

The explanation which the Sensualistic philosophy is obliged to give of our affections of taste is exactly parallel to its moral theory. It recognizes no rational æsthetic judgment whatever. It recurs again to the original fact, that sensations are either pleasant or painful. These experiences, modified and combined by associations, are, with them, sole source of our sentiments of beauty, sublimity, and their opposites. Sensualist is impelled to this shallow solution by the same influence which corrupted his ethical theory; his creed will not permit him to ascribe to the mind a supersensuous primitive power of judgment. Thus, the refutation of this æsthetic scheme would give us a similar test of the error of the creed. But only one point will be raised here. If the same power of association is the instrument, and the same natural pleasures and pains of sense are the materials, both of the ethical and æsthetic sentiments, how is it that they do not form one general class in men's minds? Why do all men regard the two kinds of sentiments as essentially different? While a virtuous object and a tasteful object both give certain pleasures when contemplated, why do we always recognize the pleasures as unlike? The beautiful action pleases and also wins our moral approbation; the beautiful animal pleases, but wins no moral esteem. Why; in fine, is it that the notion of obligation is always combined, by the healthy mind, with the moral judgment, and never with the æsthetic? I am bound to be like the man Jesus, and am unworthy and ill-deserving if I do not strive to be: I am not bound to be like Adonis, and forfeit no moral esteem by not being so. This one question, insuperable for the Sensualist, is enough to bring both his moral and his æsthetic analysis into discredit.

CHAPTER V.

POSITIVISM.

POSITIVISM," says M. Guizot, in his Meditations, "is a word—in language a barbarism; in philosophy a presumption." Its genius is sufficiently indicated in its chosen name, in which it denominates itself, not like other sciences, by its object, but by a boast. The votaries of physical studies often disclose a materialistic tendency, depreciating moral and spiritual The egotism and feebleness of the human understanding ever incline it to exaggerations and partial conclusions. Man's sensuous nature concurs with the fascination of the empirical method applied to sensible objects, to make him overlook the spiritual. Physicists become so elated with their brilliant success in detecting and explaining the laws of second causes, that they come to think practically, as though the mind needed no higher cause. Thus they overlook the first cause, which constantly presents itself to the reason in all the others. This tendency to an exclusive or anti-theistic Naturalism, which is but an infirmity and vice of the fallen mind of man, no one has avowed so defiantly in our age as M. Auguste Comte, the pretended founder of the "Positive Philosophy." His attempt is nothing less than to establish this Naturalism in its most absolute sense, to accept all its tremendous results, and to repudiate as worthless all human beliefs which cannot be established by exact experimental and physical methods.

A'though it is not just to confound the man and his

opinions, we always feel a justifiable curiosity touching the character of one who claims to lead our beliefs. He appeared before Guizot, when member of the Cabinet of Louis Phillipe, with the modest demand that he should found for him a professorship of the History of Physical and Mathematical Science in the College of France. That statesman relates: "He explained to me drearily and confusedly his views upon man, society. civilization, religion, philosophy, history. He was a man single-minded, honest, of profound convictions. devoted to his own ideas, in appearance modest, although at heart prodigiously vain; he sincerely believed that it was his calling to open a new era for the mind of man and for human society. Whilst listening to him. I could scarcely refrain from expressing my astonishment that a mind so vigorous should, at the same time. be so narrow as not even to perceive the nature and bearing of the facts with which he was dealing, and the questions he was authoritatively deciding; that a character so disinterested should not be warned by his own proper sentiments—which were moral in spite of his system—of its falsity and its negation of morality. I did not even make any attempt at discussion with M. Comte; his sincerity, his enthusiasm, and the delusion which blinded him, inspired me with that sad esteem which takes refuge in silence. Had I even judged it fitting to create the chair which he demanded. I should not for a moment have dreamed of assigning it to him.

"I should have been as silent and still more sad if I had then known the trials through which M. Auguste Comte had already passed. He had been, in 1823, a prey to a violent attack of mental alienation, and in 1827, during a paroxysm of gloomy melancholy, he had thrown himself from the Pont des Arts into the Seine, but had been rescued by one of the King's guard. More than once, in the course of his subsequent life,

this mental trouble seemed on the point of recurring."

The reader, allowing for the courteous euphemism of M. Guizot, can surmise from the above what manner of man Comte was. His admiring votary and biographer, M. Littré, reveals in his master an arrogance and tyranny which claimed every man who expressed interest in his speculations as an intellectual serf, and which resented all subsequent mental independence as a rebellion and treachery to be visited with the most vindictive anger. That his mental conceit was, beyond the "intoxication" which M. Guizot terms it, a positive insanity, is manifest from his own language. On hearing of the adherence of a Parisian editor to his creed, he writes to his wife: "To speak plainly and in general terms, I believe that, at the point at which I have now arrived. I have no occasion to do more than to continue to exist; the kind of preponderance which I covet cannot fail to devolve upon me." . . . "Manest no longer feels any repugnance in admitting the indispensable fact of my intellectual superiority." And to John Stuart Mill, at one time his supporter, he wrote of "a common movement of philosophical regeneration everywhere, when once Positivism shall have planted its standardthat is, its light-house, I should term it-in the midst of the disorder and confusion that reigns; and I hope that this will be the natural result of the publication of my work in its completed state." (This is his Course of Positive Philosophy, finished in 1842.) This is the man, half-fanatic and half-crazed with conceit, who is authority with a large part of the Sensualistic philosophers of our day!

"Positivism" takes its pretext from the seeming certainty of the exact sciences, and the diversity of view and uncertainty which appear to attend metaphysics. It points to the solid and brilliant results of the former, and to the asserted vagueness and barrenness of the latter. It reminds us that none of the efforts of philosophy have compelled men to agree touching absolute truth and theology; but the mathematical and physical sciences are asserted to carry perfect assurance and complete agreement to all minds which comprehend their proof. In these, then, we have a satisfying and fruitful quality, "positivism;" in those, only delusion and disappointment. Now, adds the "Positivist," when we see the human mind thus mocked by futile efforts of the reason, we must conclude either that it has adopted a wrong organon for its search, or that it directs that search towards objects which are in fact, inaccessible to it. Both these suppositions Positivism holds true, as to philosophy and theology. Of those questions usually treated by philosophy and the-ology, the only ones which admit of any solution, are problems of sociology, and they must receive their solution from "Positivism." The rest are illusory. It claims that history also shows that this new science is the only true teacher. For when the course of human opinion is reviewed, they say it is always found to move through three stages. In its first stage, the human mind tends to assign a theological solution for every natural problem which exercises it: it resolves everything into an effort of supernatural power. In its second stage, having outgrown this simple view, and becomes metaphysical, it searches in philosophy for primary and universal truths, and ascribes natural effects to à priori ideas. But in its third, or adult stage, it learns that the only road to truth is the empirical method of exact science, and comes to rely exclusively upon that. Thus, argue they, the history of human opinion points to "Positivism" as the only teacher of man.

But Conte, while he denies the possibility of any science of psychology, save as a result of his "Positivism," none the less begins with a psychology of his

own. And this is the blankest sensualistic. He who declares that science cannot have any à priori truths, virtually adopts as his à priori truth the ground-maxim of that psychology; he holds that the mind has, and can have, no ideas save those given it by sensitive perceptions, and those combined therefrom. The only possible object of science, therefore, is the phenomena of sensible objects and their laws. It can recognize no cause or power whatever, but such as metaphysicians call second causes. It has no species of evidence whatever, except sensations and experimental proof. Hear the science define itself:

"Positive philosophy is the whole body of human-knowledge. Human knowledge is the result of the forces belonging to matter, and of the conditions or laws governing those forces."

"The fundamental character of the positive philosophy is, that it regards all *phenomena* as subjected to invariable natural laws, and considers as absolutely inaccessible to us, and as having no sense for us, every inquiry into what are called either primary or final causes."

"The scientific path in which I have walked ever since I began the labors that I obstinately pursue to elevate social theories to the rank of physical science, are evidently, absolutely, and radically opposed to everything that has a religious or metaphysical tendency." "My positive philosophy is incompatible with every theological or metaphysical philosophy." "Religiosity is not only a weakness, but an avowal of want of power." "The 'positive state' is that state of the mind in which it conceives that phenomena are governed by constant laws, from which prayer and adoration can demand nothing."

Such are some of the declarations of his chief principles made by *Comte* himself. They are perspicuous and candid enough to remove all doubt as to his

meaning. He also distributes human science under the following classes. It begins with mathematics. the science of all that which has number for its measure: for here the objects are most exact, and the laws most rigorous and general. From mathematics the mind naturally passes to physics, which is the science of material forces, or dynamics. In this second class, the first sub-division, and nearest to mathematics in the exactness of its laws, is astronomy. or the mécanique céleste. Next come mechanics, then statics, and last, chemistry, or the science of molecular dynamics. This brings us to the verge of the third grand division, the science of organisms; for the wonders of chemistry approach near to the results of vitality. This science of organisms, then, is biology, the science of life, whether vegetable, insect, animal, or human. The fourth and last sphere of scientific knowledge is sociology, or the science of man's relations to his fellows in society, including history, politics, and whatever of ethics may exist for the Positivist. Above sociology there can be nothing; because beyond this sensation and experimental proof do not go; and where they are not, is no real cognition. Comte considers that the fields of physics and mathematics have been pretty thoroughly occupied by Positivism; and hence the solid and brilliant results which these departments have vielded under the hands of modern science. Biology has also been partly brought under his method, with some striking results. But sociology remains very much in chaos, and unfruitful of safe conclusions, because Positivism has not yet digested it. All the principles of society founded on psychology and theology are, according to him, worthless; and nothing can be established, to any purpose, until sociology is studied solely as a science of physical facts, and regular physical laws, without concerning ourselves with the vain dreams of laws of mind, free agency and divine providence.

Such, in outline, are the principles of Positivism. Let us consider a few of its corollaries. One of these. which many do not deign to conceal, is a stark materialism. They know no such substance as spirit, and no such laws as the laws of mind. For, say they, man can know nothing but perceptions of the senses, and the reflex ideas formed from them. "Positive Philosophy," which, they say, includes all human knowledge. is "the science of material forces and their regular laws." Since spirit and the actings of spirit can never be phenomena (i. e., changes known by sense-perception), it is impossible that science can recognize them. This demonstration is, of course, as rigid against the admission of an infinite Spirit as any other, and more so, as Positivism repudiates all infinite ideas. Nor does this system avail itself of the plea that there may possibly be a God who is corporeal. Its necessarily atheistic character is disclosed in the assertion that true science cannot admit any supernatural agency or existence, or even the possibility of the mind's becoming cognizant thereof. Since our only possible knowledge is that of sensible phenomena and their natural laws, which are absolutely invariable, material nature must, of course, bound our knowledge. Her sphere is the all. If there could be a supernatural event (to suppose an impossibility), the realizing of it would destroy our intelligence, instead of informing it. For it would subvert the uniformity of the natural, which is the only basis of our general ideas, the norm of our beliefs. Positivism is, therefore, perfectly consistent in denying every supernatural fact. Hence the criticism of its sympathizers, when, like Renan, they attempt to discuss the facts of the Christian religion and the life of Jesus Christ. Their own literary acquirements and the force of intelligent opinion deter them from the coarse and reckless expedient of the school of Tom Paine, who rid themselves of every difficult fact in the Christian history by

a flat and ignorant denial, in the face of all historical evidence. These recent unbelievers admit the established facts; but, having approached them with the foregone conclusion that there can be no supernatural cause, they are reduced, for a pretended explanation, to a set of unproved hypotheses and fantastic guesses, which they offer us for verities, in most ludicrous contradiction to the very spirit of their "positive philosophy."

What can be more distinctly miraculous than a creation? That which brings nature out of *nihil* must, of course, be supernatural. Positivism must, therefore, deny creation as a fact of which the human intelligence cannot possibly have evidence. As the universe did not begin, it must, of course, be from eternity, and, therefore, self-existent. But being self-existent, it will, of course, never end. Thus, matter is clothed with the attributes of God.

The perspicuous reader doubtless perceives that these deductions, when stripped of the verbal forms of philosophy, are identical with the vulgar logic which one hears occasionally from atheistic tailors and shoemakers: "How do you know there is a God? Did you ever see Him? Did you ever handle Him? Did you ever hear Him actually talking?" Those who have heard the philosophy of tap-rooms, redolent of the fumes of bad whiskey and tobacco, recognize it as precisely that of Positivism, adorned with more sounding phrase.

Once more: Positivism is manifestly a system of rigid fatalism; and this also its advocates scarcely trouble themselves to veil. According to them, human knowledge contains nothing but *phenomena* and their natural laws. "The positive state is that state of mind in which it conceives that *phenomena* are governed by constant laws, from which prayer and adoration can demand nothing." "The fundamental character of positive

philosophy is, that it regards all phenomena as subject to invariable laws." Such are Comte's dicta. The only causation he knows is that of physical second causes. These, of course, operate blindly and necessarily. This tremendous conclusion is confirmed by the doctrine of the eternity and self-existence of nature; for a substance which has these attributes, and is also material, must be what it is, and do what it does, by an immanent and immutable necessity. Positivism must teach us, therefore, if it is consistent, that all the events which befall us are directed by a physical fate, and that the actions which we perform are also directed by similar causes; that, in short, we are between the jaws of a physical machine, with all that is dear to us, and that our own free agency is illusory.

Cointe avows that his classification of the simpler sciences-mathematics, mechanics, chemistry, biology —was elaborated chiefly for the purpose of bringing the more complicated one of sociology under the positive method. The two banes of human thought, metaphysics and theology, had so perverted sociology, that he found it in a greater state of confusion than any other. Hence, his most important mission is to reconstruct or regenerate this part upon the Positivist method. Let us see the result. Sociology must, of course, be studied exclusively upon the phenomenal method. Hence, the only trustworthy sources of its data are biology (as this school barbarously calls zoology) and history. Whatever man can learn primarily about the laws of mind and its faculties, he must gather from phrenology! Later in his studies, Comte. becoming dissatisfied with the phrenological map of Gall and Spurzheim, which pretended to a basis of observed facts, constructed one which he deemed more correct, upon purely hypothetical grounds dictated by a purely subjective distribution of the mental faculties. Here we have precisely such consistency as we expect

from a crazy man! This is the philosopher who ostracised all à priori, subjective truth, all spirit, and all psychology, beginning by a psychology both subjective and hypothetical! But let us see the practical conclusions of a sociology thus founded. Europe and America were to be broken up into little States of a few million people each. Every such State was to be governed by an oligarchy of three wealthy bankers, who were to appoint their successors by their own flat, and govern absolutely, without parliaments, elections, or any restric-The fashionable French doctrines of liberty. fraternity, and equality, he utterly flouted. All the wealth of the State was to be centered in a few hereditary hands; and all the rest of the people were to be operatives for these capitalists. Such was to be the social structure, all sustained and operated symmetrically by the potent but gentle influence of the positive philosophy. But, alongside of this secular oligarchy, there was to be a "spiritual order," composed of the positive philosophers and educators. As all theological systems and gods were exploded, of course there could be no church nor priesthood, in the ecclesiastical sense; the spiritual order is simply the scientific caste in this oligarchical state. To them was to be committed all education of youth, all of whom were to be advanced to a certain degree in "positive science." The spiritual order was also to pronounce upon the wisdom and justice of the measures of the oligarchs; the advisers were to have no power of enforcing their decisions, except reason; but that, among rulers and people enlightened by "Positivism," would always be sufficient. At the head of this spiritual caste of all the commonwealths of the whole world was to be one supreme philosopher, the embodiment of infallible "Positive" truth, whose title was to be "Pontiff of Humanity." From his scientific dicta there would be no appeal whatever; and after his dominion was erected, there was to be no

liberty of dissent whatever for any one, learned or unlearned. Positivism, as established by *Comte*, was thenceforward to reign unquestioned, with all the majestic sway of infallibility, and liberty of thought would be a crime. The first "Pontiff of Humanity" was, of course, to be *Comte* himself; and he was to appoint his successor by his sole authority. The philosophic pope predicted also when this great revolution would take place—in precisely thirty-three years from the date of the publication of his evangelion.

Although Positivism knew no God, "neither angel nor spirit," for all this it was to have a splendid religion. A religion without a God did not strike Comte as at all a solecism: nor does it strike Mr. I. S. Mill as such. An object, however, it was to have; and this was to be aggregate humanity; the whole mass of men, dead, living, and to live hereafter. This aggregate, Comte called the "Great Being." He devised a system of worship for it, with eighty-four holy days each year, and nine sacraments. As the Positivist believes in the annihilation of all the dead, and as the future generations are not yet in existence, it may seem difficult to imagine how the Great Being is to be made up. But that the people who find a spiritual and unchangeable God too shadowy to have a place in their positive philosophy, should make a deity of a non-entity in large part, is only in character with the contradictions of their system. We are assured that the "Pontiff of Humanity" proposed the whole plan in perfect gravity.

To the sober mind it seems perfectly obvious that Comte was a learned man crazed, either by constitutional disease, or by maniacal conceit. His speculations should occupy rather the place of morbid specimens, the monstrosities of mental disease, than of a system of philosophy. But they manifestly influence the science of this generation to a surprising degree. We are continually told that in France, in Germany, and especially in

Great Britain, they are avowed by multitudes, and boast of prominent names. This is to be accounted for, not by any plausible consistency in "Positivism," or special ability; but by the sympathy between it and the Sensualistic philosophy. The two systems foreshadow in common the darling results of infidelity, materialism, the denial of the supernatural, the denial of man's immortality, and atheism. If it be asked, how many Positivists we have the question will receive two answers, according to the strictness or width with which the term is used. Those who follow Comte in everything, are few; for such were his arrogance, dogmatism, intolerance, and inconsistencies, that few could cleave to him through his whole career. J. S. Mill, while introducing his works to Englishmen through the Westminster Review, is heard dissenting from Comte's scornful depreciation of logic and psychology, as ever destined to be un-positive and no sciences. For, the reviewer had himself written a large work on Logic, and his father one on Psychology. But the essential features of the system, Mill warmly applauds. So, Dr. Thomas Huxley, Prof. Tyndal, and Mr. Spencer may be heard declaring that they are no Positivists; that is to say, they do not hold some of Comte's ideas touching the distribution of the sciences. But they also advance, with confidence, the essential features of his system, in connection with the evolution theory. Another of these evil portents on the literary horizon is Henry Thomas Buckle, in his "History of Civilization in England." His theory of man and society is essentially that of the Positivist. He regards all religion as the outgrowth of civilization, instead of its root; and is willing to compliment Christianity with being the best religious effect of the British mind and character; (provided Christianity can be suggested without its ministers, whose supposed bigotry, ecclesiastical and theological, never fails to inflame his philosophic bigotry to a red

heat). But he anticipates that English civilization will, under Positivist teachings, ultim tely create for itself a religion much finer than Christianity. He disdains psychology; he does not believe man's consciousness a trustworthy witness; and he regards those general facts which are disclosed by statistics, for instance, concerning human action, the only materials for a science of man and society. He commends intellectual scepticism as the most advantageous state of mind. He is an outspoken fatalist, and regards the hope of modifying immutable sequences of events by prayer, as puerile and absurd. He regards "positive science" as a much more hopeful fountain of well-being and progress, than virtue or holiness.

It is significant, also, to hear so distinguished a naturalist as Dr. Hooker, a few years ago president of the British Association, in his inaugural address, terming natural theology, "that most dangerous of two-edged weapons;" discarding Metaphysics as "availing him nothing," and condemning all who believe any of its truths as "beyond the pale of scientific criticism;" and declaring roundly that no theological or metaphysical proposition rests on positive truth.

As Americans are always prompt to imitate Europeans, especially in their follies, it is scarcely necessary to add, that positivist dogmas are rife in our current literature. The tendencies of physicists are, as has been noted, towards an anti-theistic Naturalism; the boldness with which the school of Conte lift up their standard, has encouraged many to gather around it. Its most deplorable result is the impulse which it gives to irreligion and open atheism. Thousands of shallow persons, who have no understanding of any connected philosophy, and are too indolent and inattentive to acquire it, are emboldened to babble materialism and impiety, by hearing it said that the "positive philosophy" has exploded the supernatural.

"Positivism," in its broader acceptation, may be said, then, to have become the prevalent type of the Sensualistic philosophy in our day. Its more reckless and daring mode of dispensing with psychological and theological truths appears to be superseding, with most thinkers of a sensualistic tendency, the milder methods of the *Condillacs* and Jas. Mill. He would not commit a great practical error, who, wishing to defend his fellow-men from the mischiefs of that system, should aim his attacks at the dogmas of *Comte*.

CHAPTER VI.

EVOLUTION THEORY.

SOUND philosophy infers the existence of an - infinite, personal God, by three processes of logic. Each is an à posteriori process, and either would be by itself conclusive. I. It is the great law of the reason, that event cannot arise without cause: ex nihilo nihil. Hence, dependent beings and phenomena reveal an independent, eternal Being and Cause. Had there been a time in past eternity when nothing was, all infinite duration must thenceforward have been a blank. Thus, by the very constitution of the mind which makes reasoning possible for us, the caused necessitates the belief in the Uncaused; the presence of the temporal necessitates the belief in the eternal: and the finite implies the infinite. He who apprehends this, will not hesitate to grant that the uncaused Cause must include the attributes revealed in his effects, intelligence, power, and will. 2. The phenomena with which experience acquaints us all express contrivance. Hence there must have been a contriver. 3. The necessary intuitions of conscience are found, on simple inspection, to contain the conviction of obligation. It is impossible to explain this obligation as relating only to ourselves, or our fellow-man, or any aggregate of men; while it includes these, it reaches beyond them. But obligation implies an Obliger. The practical, or ethical side of the reason, therefore, leads us inevitably back to the same absolute Being, and necessitates, moreover, the recognition of His moral perfections, while re-affirming those of power, intelligence, and will.

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There is a supposed pantheistic evasion from this adamantine chain. This the Sensualistic philosophy cannot consistently embrace, because Pantheism is essentially idealistic. The only other evasion possible is that of an eternal series of temporal beings and events. Atheism has attempted to proceed thus: It admits that, inasmuch as beings now exist, beings must have eternally been in existence. But, it asks, why may not the eternal somethings have been caused somethings, such as those we see around us: separated from us in duration by an infinite number of intermediate links in chains of similar beings? To this scheme of a selfexistent infinite series, uncaused from without, philosophy advances these insuperable objections: That in such a series no immediate antecedent is, by itself, adequate cause for its immediate successor; and that previous links in the chain could not be cause, since they were totally absent from the rise of the sequent effect. Thus the utter fallacy was exposed, which seeks to impose on our minds by the vague infinitude of the series as a whole. We were taught that no series made up solely of effects, each dependent, can as a who e be self-existent. Thus perished that evasion of the atheist.

Obviously, if there is any expedient for resuscitating it, this must be found in the attempt to prove that the law, "Like produces like," is not the whole explanation of the series. By that law a series of beings, forming a genus, may continue, or may perish; but by that law alone it can never be be originated; for one genus of beings does not transmute itself into a new and different one. On the law, "Like produces like," alone, it is demonstrated the series of nature cannot be self-existent. Hence the last hope of atheism is, to attempt to prove that this law is not the whole natural law of the series; that the Like does not produce merely the like: in other words, that the series contains within itself a natural

power of differentiating its effects, at least, slightly. This is the heart of the "evolution theory" of our day. By the short review of the great theistic argument, which I have given, we discover the precise locus of the "evolution theory" in philosophy, and we perceive the logical instinct by which its advocates have been led (some of them, perhaps, semi-consciously) to elaborate it.

This scheme is, however, no novelty. It is, after all its pretended refinements, but a revival of the "atomic theory" of the Greek atheist, Democritus, adopted by the Epicurean school, but so utterly discredited by the combined logic of the other schools of philosophy, that it has been driven for centuries into disgrace. The application of an evolution-hypothesis to the descent of man has been often attempted; as by Lord Monboddo, who almost exactly anticipated Dr. Charles Darwin's conclusion. In the eyes of some modern physicists, however, it has received new plausibility from the more intelligent speculations of the Naturalist, La Marck, and the "Vestiges of Creation," a work ascribed to Mr. Robert Chambers, of Scotland. But it appears in its fullest form in the two works of Dr. Charles Darwin. "Origin of Species," and "Descent of Man," published with an interval of some eight years between them. This Naturalist thinks that, in animated nature, he has found the law of "Like producing like," modified by the two laws of "natural selections" and "survival of the fittest." Mr. Wallace (who is said to have devised the same hypothesis independently of Dr. Darwin about the same time) gives, in substance, this summary of it. It asserts:

- 1. The law of multiplication of animals in geometrical proportion. Any one species, if unchecked, would fill the whole world. The checks are the destruction of the germs and the living individuals of the species by enemies and by adverse conditions.
 - 2. The law of limited population, by which a given

adapted area of our earth has always been fully stocked with adapted species. Hence the spread of one species must imply some limitation or destruction of some other. There is, thus, a constant struggle for existence.

- 3. The law of Heredity, by which the progeny reproduces all the essential points of the parents, whether originally generic or newly-developed.
- 4. The law of variation, by which such differences in individuals, favored by external conditions, accumulate until they give rise to a distinct variety.
- 5. The law of equilibrium in nature, whereby the individuals and species best adapted to existing conditions survive, and the less fitted perish.

Some of these laws are partly true as expressions of general facts. Dr. Darwin supposes that they are all illustrated by the race-varieties (which are certainly very striking) produced in genera and species whose original unity is ascertained, through the arts of the bird-fancier and stock-breeder. The result of these laws, modifying the law of the reproduction of likes by likes, would be a slight differentiation of successors from predecessors, in any series in animated nature. This difference, at one step, might be almost infinitesimal: this conatus of Nature towards evolution being totally blind, and moving at hap-hazard, might result in nothing permanent through a myriad of experiments or instances; and only evolve something stable in the species, in advance of its prior points, in the ten-thousandth case. Yet, if we postulate a time sufficiently vast, during which the law has been working, the result may, at length, be the evolution of the highest from the lowest forms of animal life. This theory. obviously, regards the process of evolution as entirely unintelligent. Both the species and the natural conditions which are co-working for the natural selection and survival of the fittest, work blindly; and when

they evolve a success, they do it by chance. The speculation thus suggests, at least, a way in which adaptation may arise, without a contriving mind. Its atheistic advocates (among whom Dr. Darwin did not rank himself) declare, with decision, that it totally explodes the teleological argument, as drawn by Paley from the contrivances in the organized world, for an intelligent Creator. For, say they, only grant time enough and a sufficiently vast multiplicity of experiments, then whatever the ratio of failures to successes by the help of this law of "survival of the fittest," the successful variations persist, and the present organized universe is the slow result. One of these followers of Darwin illustrates this atheistic inference thus: What more blind than a hurricane? Yet a hurricane may perform the apparently contriving work of transplanting a sapling, after this fashion. The first mighty blast of the gale has blown down a tall pine, uprooting with it a mass of earth, and leaving a cavity at the end of the prostrate trunk. Into this is accidentally dropped the sapling, just torn from its soft bed by the storm. The few clods of mould clinging to its rootlets will, by the natural power of gravitation, make it fall root-downwards. The torrents of rain which follow the gale will wash some soil from the up-torn mass upon it; and thus we see it regularly planted in place of the dead pine. A French advocate of Darwin attempts thus to rebutt the principle of common sense, which teaches us that blind chance cannot be cause of an ordered result. "Cicero attempts to illustrate this, by citing the heroic poems of Ennius, and asking how incredible it would be that these should have been produced by pure accident, through the throwing together of a great multitude of separate letters from a basket. Give me an infinite number of throws, and an eternity to throw in; then, amidst the infinite numbers of possible collocations which the letters may assume, may be the very one

constituting the poems of Ennius." By this species of speculation is the attempt now made to rob us of that teleological argument, from contrivance to a Contriver, which has satisfied every solid mind from Job and Socrates to our age.

Darwin, in his second book, "Descent of Man," applies his theory of the origin of species to the extreme case of the development by evolution of the human race. He supposes that this took place many thousands of years ago, under the natural operation of his two laws, from a highly-developed species of ape, now probably extinct. The ape's progeny, of course, began his human career in a state of primitive barbarism, as is argued by Sir John Lubbock. Many tedious centuries passed away before the human became enough humanized to have a history. The ape, who was the parent of man, was, in turn, the developed progeny of some less perfect animal. Thus, the series is followed back, until we find the simplest form of animal life. Thus, to construct animated nature, Darwin requires only his laws of evolution and the rudimental forms of animal life preëxisting by the power of a Creator, or of some other agency. This account of man's descent involves, of course, the necessity of evolving his spiritual nature out of the instinctive animal functions of the brute. This arduous task Darwin attempts, actually endeavoring to account for the marvels of the enlightened human conscience as a development of the fears and habits of the trained animal. The sportsman says to his pointer-dog: "You ought not to have flushed those birds!" He punishes him, and the dog cowers and expresses his guilt, fear, and penitence, by his deprecatory gestures. What does that "ought not" mean to that dog? What is the lesson to him of those strident tones and of those blows? Thus, according to Darwin, we have the whole rudiment of the notions of obligation and merit in the virtuous hero. The whole

splendid result is but the evolution, by habit, of those ideas of an act and its sequent pain, given in the animal sensations, and connected by association. But man's intellectual and moral superiority to the brute's is chiefly accounted for by this fact, that among the physical improvements evolved is a great increase in the volume and convolutions of the brain. According to this animal system, it is the brain which thinks: and the man has gotten more talent than his cousin, the brute, because he has developed more brain. Thus far Darwinism.

Dr. Thomas Huxley, and Prof. Tyndal, seconded by many British, Continental, and American Materialists. have undertaken to complete the process. They undertake to supply, without a Creator, that original and rudimental animal source, which Darwin required to start with. Huxley's contribution to this work is, to attempt to identify animal with vegetable life. This he endeavors to do by finding the origin of all vegetable and animal life in a substance which he calls "protoplasm," which is his "physical basis of life." This, he asserts, however varied, always exhibits a threefold unity, of faculty, of form, and of substance. First. The faculties are alike in all, contractility, alimentation, and reproduction. All vegetable things are sensitive plants, if we knew them. And the difference of these functions in the lowest plant and highest animal is only one of degree. Second, Protoplasm is everywhere identical in molecular form. And, third, Its substance is always oxygen, hydrogen, nitrogen, and carbon. The fate, then, of all protoplasm is death, that is, dissolution into its four elements; and its origin is the chemical union of the same. Does the compound display properties very different from the elements? So has water properties very unlike the mixture of two volumes of hydrogen and oxygen gas. Yet the electric spark, flashed through them, awakens the chemical affinity,

which makes water. So, a little speck of pre-existing protoplasm causes these dead elements to arrange themselves into new protoplasm. There is, then, no more cause to assume in the living organism, a new and mysterious cause, above that of chemical affinity, and to name it vitality, than in the other case, an imaginary property of "aquosity." And as a certain chemical aggregation of the four elements is protoplasm, the basis of all life: so the higher vital functions including those of mind, must be explained by the same force, acting in a more complicated way.

Huxley left, if his scheme were credible, only one gap to be filled: that between organic and inorganic life; and he suggested the way of filling this chasm, by asserting that the only force which unites the four simple elements into "protoplasm" is chemical affinity, and the only difference between the organic and inorganic masses is, that the chemical affinities in the former are more complicated. Yet, he himself admitted that no chemist had ever produced any vitalized matter, without generation from a vital germ. His associates, however, attempt to fill this remaining chasm, and to leave no place nor use for a Creator anywhere. Prof. Tyndal, for instance, in his inaugural discourse, as President of the British Association, formally attempts to revive the forgotten system of Democritus; and to generate the Universe from nothing but atoms. He gives us himself the following outline of this old pagan-atheist system: 1. "From nothing comes nothing. Nothing that exists can be destroyed. All changes are due to the combination and separation of molecules." 2. "Nothing happens by chance. Every occurrence has its cause, from which it follows by necessity." 3. "The only existing things are the atoms and empty space; all else is mere opinion." 4. "The atoms are infinite in number, and infinitely various in form; they strike together, and the lateral motions and

whirlings which thence arise are the beginnings of worlds." 5. "The varieties of all things depend upon the varieties of their atoms, in number, size, and aggregation." 6. "The soul consists of fine, smooth, round atoms, like those of fire. These are the most mobile of all. They interpenetrate the whole body, and in their motions the phenomena of life arise."

Tyndal gives us to understand that he accepts this scheme as his own, in all but the last proposition. He says: "The first five propositions are a fair general statement of the atomic philosophy as now held. As regards the sixth, Democritus made his fine, smooth atoms do duty for the nervous system, whose functions were then unknown." In Tyndal's atomic plan, we are thus given to understand the nervous system "does duty" for a soul. He then proceeds, after adopting the pretended results of Darwin and Huxley with fulsome laudation, to extend the evolution theory to all mental and moral faculties, including the highest. Here he adopts, with equally intense admiration, the dogmas of Mr. Herbert Spencer, concerning the hereditary transmission of instinctive habitudes, from parent to progeny, until by a cumulative process, the whole discipline of the animal instincts, recorded on the matter of the brains of the parents through all past generations, is bequeathed to ours. Thus, as evolution was gradually, through millions of ages, evolving the form of a Newton, or Shakespeare, from the primary animal cell to the mollusk, the reptile, the mammal, the ape, the man, this cumulative process was gradually evolving the rudimental animal instinct of the insect, into the mind of a grand philosopher or poet. Tyndal thinks that the tactual sense is the rudiment of all the other senses, and, so, of all mind. Hence, the reason why human generations have at last evolved from the brute mind a human mind, is, that his members have become so developed that he can feel (with his fingers, lips,

etc.) more things than shell fishes, or horny-hoofed animals. Thus, parrots become wise birds, because they climb about and grasp things more with their claws and beaks than other birds do. Elephants are so very wise among animals, because their long and supple proboscis is so fine an implement to feel things with. Apes are smarter than most animals because their prehensile feet enable them to finger things almost like men. Horses, whose horny hoofs give them so sorry a chance to finger anything intelligibly with their extremities, derive some chance for getting up an intellect, by the help of their nibblings with their very flexible lips. Tyndal thus reaches precisely the conclusion of the materialist Helvetius, in the last century, who, the student will remember, referred the whole difference between human and brute faculties to the bodily difference, and chiefly to the structure of the human hand. And this is the sort of speculation to which, under the name of science, the assembled physical learning of Great Britain delights to pay its especial homage! What more deplorable illustration can we have of the intellectual degradation to which man sinks under the teachings of sensualism and atheism!

But Tyndal, like Huxley, after obliterating all distinction between mind and matter, finds himself involved in insuperable difficulties. Hence, they resort to a sort of spiritualizing of matter. That is, they leap from a stark materialism, to a species of idealism. Instead of identifying mind with matter, they would have us identify matter with mind. There is but one kind of power in the universe, and that is force; and one kind of effect, which is motion. Mechanical action is motion of masses; and mental action is motion of molecules. Mind-power will some day be literally correlated to material forces, as caloric in water has been to elasticity in steam. We must not, then, think of matter as a something dull, gross, passive, simply pon-

derable, opaque, and inert; but as the refined habitat of force, the invisible, universal cause. Thus again, we see extremes meeting, and the extravagance of materialism driving its advocates into the dreams of idealism.

Tyndal, in conclusion, cautions his hearers that they must not suppose this banishment of spirit, God, and immortality, out of the universe, need banish religion. Not at all. There is, indeed, no footbold for religion in man's rational nature; but his emotions impel him to religion. And emotions are one essential side of human nature, and a very useful and noble side. Hence, the demand which man's emotive system makes for a religion is not to be despised. The result seems to be this: that provided a man knows that he knows nothing on earth about any God, he may feel as affectionately disposed towards God as he pleases, and Professor Tyndal will not despise him! But if he ever pretends to see any reason for his feelings, he is not to be tolerated. Such is a just statement of this charitable and pious concession, and no travesty. The absurdity is sufficiently exposed by the statement itself. Or if any farther explanation is needed, it is found in this question: Under what condition can rational emotions rise in the soul? Only when a proper object of them is believingly seen in the intelligence. If one has feeling under any other condition, it is blind; and unless it has a merely animal function to fulfil, it is a morbid affection of the soul, and needs to be rebuked. Hence, if we are told that our religion can be a matter of feeling alone, and not of reason, it is the same as telling us to have no religion.

Mr. Herbert Spencer is regarded, evidently, by Evolutionists (and perhaps by himself) as the Aristotle of Evolutionism. Beginning from the method of the Sensualistic philosophy, he presents us, at last, another

striking instance of the maxim that "Extremes meet," by usurping and exaggerating the most extreme features of Hamilton's rational system. Spencer begins by adopting the ultra-nominalism of James Mill, as to the formation of our general concepts. Ignoring the power of comparison in the mind, which is correctly made the basis of the doctrine of the Conceptualist, they treat our general names as mere names, answering to nothing but as many of the individuals as the mind can remember together. Hence, the larger the class, or image, the more vague the idea, say they. Hence, again, the notions which we acquire the habit of attaching to very large classes or comprehensive images, have less and less conformity to the things comprehended. They are mere symbols, as Spencer calls them, "symbolic conceptions," which we get into the habit of substituting for our ignorance, where the objects named have really outgrown our conceptions. We have no guarantee whatever of their real truth. This initial sophism quietly omits the known fact, that every classformation in the mind is an act of the à priori and valid power of comparison: and that the general term connotes the common qualities, and denotes the individual things possessing in common those qualities. Spencer outrages, at the beginning of his process, the wellestablished law of logic, that in general terms, as we widen the comprehension of a class, taking in more individuals, we unavoidably diminish the number of distinguishable qualities seen to be common to all; that is to say, as we increase the denotation, we diminish the connotation. Hence, the truth is, that our most general ideas are the simplest. The idea in "animal" is simpler, and, in that sense, more perspicuous, than the idea in "quadruped": because the name of this smaller class connotes all the qualities in "animal," and at least one more besides. Hence, when Spencer calls these general notions "symbolic ideas," and when he says they are

valid only when sustained by an individual verification, he asserts a fundamental error of Sensualism.

The next foundation-stones of his system are the two Hamiltonian doctrines, that our knowledge is only relative, and that our minds are incapable of having any cognition of the unconditioned. Both of these he usurps and employs for sweeping and destructive uses. to which Hamilton would have utterly demurred. That he could usurp them shows, as we shall argue hereafter. that Hamilton mixed some errors of Sensualism in his own system. Whereas the Scotch philosopher claimed real knowledge for our perceptions of substance and the primary attributes of matter, and only made the remainder of our knowledge relative, Spencer would make it all so. Hamilton's love of strong and of novel phraseology prompted him to exaggerate that truth which all careful minds apprehend, that our ideas about things infinite and absolute must be incomplete, because our own minds are finite; and he loved to state it as an inability to think the unconditioned. This proposition Spencer pushes to the absurdity that all absolutes are to us wholly unknowable (concepts merely symbolic). Twenty years ago, Dr. M'Guffey, being in his study with me, pointed to Mansel's "Limits of Religious Thought," saying: "Have you read that book?" I answered that I had. Said he: "I beg that you will read it again carefully. I regard it as a dangerous and erroneous book, and I should be glad to know whether you concur with me." I could say that I had already concurred—it seemed to me unspeakably mischievous. Mansel's dogma, that God cannot be truly known to our thought, because absolute and infinite, was precisely to Spencer's purpose; and he, of course, seizes it with much applause. He adopts all its glaring errors. He also extends the same "unknowable" character to all our abstract ideas; to that, of course, of time, of space, of spirit, of matter, of beginning, of ending. While he

admits that no mind can help having these ideas, no one can ever have a valid title to think them. On this, as well as on the old Sensualistic ground, then, he dismisses God, substance, and spirit, from his philosophy.

But the question now presses him: What is philosophy? He cannot give the answer of any prior student: as, that Philosophy is the meta-physical; or, that it is the science of rational spirit and God; or, that it is the science of absolute being; for he has nothing but the physical on his plan. He has no spirit, no God, no absolute being. What, then, can Mr. Spencer's philosophy be? His answer is: Philosophy is Science completely "unified," by which he means not merely sciences shown to be consistent inter se, but that all sciences are systematized laws of one single power. Can there be such a demonstration? Ought there to be such a demonstration? All these deep questions Mr. Spencer virtually answers by his simple authority. He says there can and must be. He says science is not philosophy until it is thus "unified." He is not satisfied with the inter-consistency of the different sciences, which has satisfied other men. He says nothing philosophical is done until all sciences are shown to be the uniform and invariable law of a single power. He deigns to give no reason why. He speaks as a philosophic Pope. So it must be. The only ground for the assumption which he deigns to give is that suggested by the remark, that man's empirical scientific knowledge seems to point to the proposition that the laws of nature are universally uniform. But if they are, the other hypothesis of a universal Providence exercised by an almighty, personal Spirit explains that result far better. Why, then, reject it for one at least as "unthinkable?" There remains no answer but that so it pleases Mr. Spencer. To any common sense it appears evident, that could Mr. Spencer establish this philosophy, then his single,

universal power would belong to the absolute, and so would be "unknowable." And then Mr. Spencer would be bound to condemn and utterly cast away his "unified" philosophy, for precisely the same reason which has made him reject natural theology. His success must be suicidal, and so it is; but this makes no difference with Mr. Spencer.

What, then, is the single power with which this philosophy is to be constructed? It is material force. He intends us to take the word in the literal sense of mechanical or astronomical science. Force is Mr. Spencer's God. There is but one cause in the universe, force; and there is but one kind of effect in the universe, motion. Is not the ultimate idea of force an unconditioned one, and therefore "unthinkable?" and is not motion, in its ultimate conception, equally so? Mr. Spencer admits it emphatically. Yet this unthinkable cause and effect constructs the whole philosophy of him, who is too philosophic to have any philosophy of an absolute or a finite Spirit, because these are "unknowable." Why this? No adequate reason appears in the whole of his speculations, except that Mr. Spencer appears not to like the Christian's God or his own soul, and he prefers Force.

The Titanic enterprise which he then proposes to himself is, to construct the whole universe,—material and spiritual, with all its beings and powers, with all its varied and opposite effects, with its miracles of wise design and wise providence,—by the sole action of blind force. The attempt is designedly termed Titanic; such it is in its audacity and in its result. The Titans, a species of hybrid monsters, vainly proposed to reach the seat of God, which true science has lifted to the fixed stars, by piling one or two fifth-rate earthly mountains upon each other. Mr. Spencer employs a certain abnormal and diseased ability in inventing a certain heap of suppositions and imaginations, and com-

bining them together, with no result save that self-contradiction which I have pointed out. His structure is briefly this:

Man's consciousness seems to give him sensations and the remembered concepts of them. Like Comte, he grants that it is impossible for a mind to construe its own ideas at all, without some general principle which we must needs begin with as à priori to the process of construction. The mind, then, must assume some principle as "provisionally true." The warrant which we get, that it and its corollaries are really true, is the congruity afterwards ascertained experimentally between them and facts. When this congruity is found to be universal,—that is, is tried by all human experience without meeting with a breach,—then it makes our system of cognitions practically valid. Such a system would evidently make of all our science an inverted pyramid. One obvious consequence would be, that no knowledge would be thoroughly settled as valid until all knowledge was acquired. But would not the mind which attained to this be literally omniscient? Undoubtedly. Omniscience, however, is an infinite thing, and must by Mr. Spencer be remanded to the position of the "unknowable." So that valid knowledge would be, on this scheme, impossible. Nor can he plead that as the congruities of the provisional hypothesis with experimental facts widened, their evidence would tend towards probabilities so high as to be practically valid. This is a confusion of thought which comes from an inaccurate comparison of this supposed process with the processes of the physicist, in testing a physical hypothesis by physical experiments. That they are fundamentally different, is made plain by a very obvious remark: that without some à priori principle to proceed upon, the physicist could not make that experimental verification at all. Thus, Dr. Franklin made the hypothesis that lightning might be electricity, and then tested it by

experiment. But no experimental test could possibly have any certain force, except on the postulate that like causes produce like effects! Experiment cannot apply a standard to its own prior standard. This whole theory of ascertaining provisional hypotheses is, then, a delusion in Sensualistic hands.

Spencer seems, in other places, to perceive this; and hence, in all the subsequent parts of his work, he loudly declares that he has an à priori truth which is undemonstrable because self-evident and necessary, and which is the all-unifying principle of science. This is, that Force is universally persistent. Its meaning is, that no element of force ever perishes or really ceases, anywhere, or in all time; but it is only transmuted into some other form or forms. Another truth, which is rather involved in this than drawn from it, is that like causes must universally produce like effects. This is evidently what Mr. Spencer means by his self-evident proposition, that law is universally uniform. The same first truth involves the conclusions that matter is indestructible: and that all motion is continuous. When the motion of a mass seems to terminate, it is only because the motion has become molecular. If a ball that was just now moving, has been stopped, it is only because the atoms of the body that stopped it, and perhaps of the ball, are now quiverin; somehow with an amount of molecular motion, invisible to our eyes, exactly equal to the former motion of the ball. Still another principle, which he holds to be directly involved in his grand first truth, is that bunglingly termed by his brethren the correlation of forces. He expresses it more accurately by asserting that any one mode of force may be transformed into any other, and will be found equivalent This, then, is his grand first truth: Force universally persistent, and as involved immediately in this: The connection of cause and effect absolutely and forever invariable: and. The transformation and equiv-

alency of forces. Grant the previous assumption, the first principle before the first, which is and remains a sheer assumption, that mechanical force is the sole power (involving the other absurd assumptions, that there is but one substance, matter; and that there is neither spirit nor God); the ideas are consistent enough. If force is absolutely persistent, then, when a given force seems to pass into an effect, that effect is but a new form of the same force, and somehow equivalent thereto. But this will be further tested at a suitable time. What we should remark here, is this singular fact: that Mr. Spencer's first, universal, necessary, selfevident intuition, the universal persistency of force, should be a doctrine only surmised, in our day, as the last deduction of a comparison of many physical sciences. Truly, in this new atheistic judgment, "the last are first. and the first last!" Still more singular is it that Mr. Spencer should himself argue deductively to prove his own first truth! He will excuse this marvelous logic. by saying that it is the very glory of it to find that which was first in analysis of laws is also last in their synthesis: that here is the crowning congruity. I return to the charge with the question: If this proposition is so necessary and self-evident, how is it that Mr. Spencer's friends, the physicists, only began to suspect it in our own generation? And how can a first truth, which, as being a first truth, cannot have any premise behind it, be what this proposition historically is (if it is a truth at all), a final deduction from premises by a multitude of experiments?

Before I pass on, I will also show, out of Mr. Spencer's own mouth, the utter inconsistency of his whole objection against our natural theology. If there were any God, he would be "the Unconditioned," and thus absolutely unknowable. Hence, to predicate any attributes of him, to propound any doctrines whatsoever about him, to offer any service whatever to him, is of

the real nature of religious impiety; and Mr. Spencer's practical atheism is much the more "religious." he expressly admits that this Force-God of his is equally unconditioned, in reality, and equally unknowable. Ought not Mr. Spencer to conclude, then, that it is bad science to propound any doctrine about it? So it seems to a plain mind. About the one "Unconditioned," infinite, personal spirit, Mr. S. forbids our having a single doctrine, or idea, or feeling, simply because it is unconditioned. About his "Unconditioned." universally persistent Force, he commands us to hold a vast multitude of doctrines; to hold, in fact, all the knowledge we have at all! But, some Evolutionist will say, Here is the grand difference: Mr. S. sees that force reveals itself by its effects, directly to sense-perception, our only faculty of cognition. I reply, that Mr. Spencer himself holds and teaches most emphatically, that perception is as merely relative, and as utterly incompetent to have any valid cognition of unconditioned reality, as any other supposed faculty. He himself declares (correctly, so far) that it is just as impossible for perception to cognize a property without thinking an unconditioned notion of true being of which it is a property; as it is impossible for à priori reason to cognize being as being, without doing so through some perceived property. But Mr. S. enables us to demonstrate his own inconsistency by his own argument. Ch. IV. Principles, § 25, having asserted that all our knowledge of the phenomenal is merely relative, he teaches us that this makes no practical difference against its utility. For, if it is regularly true that our perceptions show us certain phenomenal antecedents immediately followed by certain results; we can take our measures accordingly, just as accurately as though we knew (what he thinks we can never know) that our perceptions corresponded exactly with the real being behind the phenomena. Now, he holds that all these phenomena are the manifestations of his Force-God. But that is the Unknowable "Unconditioned." Yet our apprehensions of its manifestations can be practically trustworthy as though it were not the unknowable! Why, then, may not an infinite personal Spirit make manifestations to our consciousness, which may be equally trustworthy? The inconsistency of this position is made all the more crushing for Mr. Spencer, by this: that whereas he knows so little about his "Unknowable," that he dares not ascribe to it any intelligence whatever; we know that our God is all intelligence, and, therefore, infinitely able to make all kinds of manifestations to our finite consciousness which His benevolence prompts.

But let Mr. Spencer proceed with his evolution of his theory. Having gotten the intuition (by deduction!) of the universally and eternally persistent force, he derives from it all other ideas. Our notion of space is our "consciousness of coëxistent positions;" position having been previously revealed in consciousness, simply as the ubi of a force, or point of force. Our notion of matter is a "consciousness of coëxistent positions that offer resistance;" resistance being the manifestation by which Force reveals itself to us. Matter and space are thus related: as we are conscious of resistance in or behind the coëxistent positions, or not. This conception of matter, Mr. Spencer has already pronounced preposterous. On p. 52, 3, "Principles," he told us how the physicist Boscovich endeavored to relieve the difficulty of conceiving matter by this hypothesis: that "the constituents of matter are centres of force, points without dimension, which attract and repel each other in such wise as to be kept at specific distances apart." How does this differ from Mr. Spencer's definition of matter, as "coëxistent positions offering resistance?" Boscovich's "points" are obviously Spencer's "positions," and Boscovich's "force" is

Spencer's "resistance." But to the former definition he objects (justly), that "a centre of force without extension is unthinkable; answering to these words we can form nothing more than a symbolic conception of the illegitimate order." Then, obviously, his own conception of space is only an illegitimate one. Yet this is made one of the corner-stones of his system. Time is but experienced succession. Our notion of material motion is simply the consciousness of matter in successive positions in time. Thus, these à priori notions are, by Spencer, generated empirically, as by other Sensualistic philosophers, save that he employs novel and obscure phraseology.

Out of these unknowables, Mr. Spencer is now prepared to construct the known Universe. He next deduces the additional principles that every motion is along the line of greatest traction or least resistance; that all motion is in its nature oscillatory; that as matter concentrates, motion dissipates itself, and as motion concentrates itself, matter is dissipated. In this last pair we have the secret of the whole universe, inorganic, living, and rational. Force does and undoes it all, concentrating matter and dissipating motion, or dissipating matter as it concentrates motion. These two laws made all the suns and planets upon the nebular hypothesis. (Although Mr. S. does not think, in the earlier part of the book, that the nebular hypothesis is proved). They also make all the plants and animals, and all the (so called) minds. At this point Mr. Darwin comes in with his evolution hypothesis for animated nature. With his help, Mr. S. easily generated, during immense tracts of ages, first, protozoa, then, in succession, the higher forms up to man. The two oscillatory laws, with the mutual reactions of organisms and their environments, the law of variation, or instability of the homogeneous, the law of the survival of the fittest, with the law of heredity, account for the gradual evolutions of man, with all his conscience, intellect, and will, out of the most rudimental insect. If we examine that rudimental life, we find nothing but a sensibility, the nascent source of a tactual sense. The changing environment acts upon this little animated mass, by a series of forces. The mass responds by corresponding changes. Hence the growth of the individual. From the same general cause, the species differentiates and some members grow new organs. The tactual sense is gradually diversified by the varied influences of the environment, into other senses. Out of these, again, countless impressions stored up in the brain, and transmitted by inheritance, gradually evolve mind; and the descendant of the dull mollusk is, at perhaps the tenmillionth remove, a Newton!

Spencer's sociology is fashioned precisely as is his psychology, out of the impressions of force. Incredible as it may seem, tribes, societies, and nations are with him literal bodies; social affections are adhesive attractions, and the common movements of will and purpose in bodies of men are literal forces. The reader will remember how Spencer flouts our more derivative conceptions, as mere "symbolic conceptions." But with him the metaphorical language which calls nations "bodies," and moral principles "forces," are perfectly literal!

The whole is only an unhealthy dream. One of the most astounding things connected with this monstrous aggregation of confusions and assumptions, is the applause it has received from some critics professedly Christian. Mr. Spencer tells us, in conclusion, that his materialism must not be regarded like the gross systems of earlier infidels, who, when they said man was mere matter, employed the word in its lowest sense, and with its heaviest associations. His materialism proposes to level up, and not to level down; to sublimate matter, and not to degrade spirit. He intimates

that his "Force" may answer as well for spirit, as spirit itself, could we only see with his eyes. For after all, his "Matter" is only a manifestation of force, and has no more substantive reality than our spirit. So, it is with him a favorite idea, a "symbolic conception" to call his absolute negation of belief touching this "Unknowable," "religion." For all this some Christian critics are thankful, and are quite consoled that Mr. Spencer, in demolishing all former beliefs, has left us thus much. They gravely propose that Christianity and unbelief shall meet together upon Mr. Spencer's as a common ground! Whether this be blindness, or cowardice, it is equally amazing and deplorable. For, in the first place, Spencer's system is overtly anti-Christian. He makes no secret of his contempt for the Christian Scriptures; and it is hard to discover any doctrine they reveal which he does not flout, from creation downwards. While the Scriptures command us to "acquaint ourselves with God, and be at peace," and while our Saviour declares that "this is life eternal. that we might know Him the only true God, and Jesus Christ whom He hath sent;" the whole of Mr. Spencer's theology is summed up in this one point: that it is irreligious to attempt to know anything about Him. Second: It is a system of practical atheism. For, some knowledge is in order to any service. If we can verify no attribute of God, then we cannot trust Him, nor pray to Him, nor obey Him. In a word, that which is to us absolutely unknowable, is practically nonexistent. Third, Mr. Spencer leaves no possibility of an immortality for man. The human being is, to him, simply an organized mass. There is no spiritual substance. The very highest functions of reason, taste, and conscience, are nothing but modifications of Force; literally the same force which, as gravity, weights the grocer's scale, or the donkey's cart, or as caloric softens the iron and expands the steam; literally trans-

formable into these, and correlated to them. When the organizing force is transmuted, then the man is subject to that "absorption of motion and diffusion of matter," which is Mr. Spencer's idea of death; and it is as much the death of the mind as of the brain and muscles. Let Mr. Spencer tell the world as much as he pleases, that his materialism levels upward, and not downward: that instead of debasing spirit he would have us refine matter into the universal "Force:" still with all sinners of the common grade, his doctrine will have the simple result of imbruting those who adopt it. For their common sense will persist in believing that force is a mechanical power contrasted with the spiritual; they will not believe the contradiction which would persuade them that the same species of power which obeys the mechanical law in the machine, and the chemical law in the laboratory, is also subjected to the spiritual law of conscience in the man. Mr. Spencer may persuade himself of this "symbolic concept;" the common sense of his pupils will not. Last, his scheme, in its sublimated form, is only a vicious aspect of the vicious scheme of pantheism. "Matter, motion. and force" contain all the phenomenal of all kinds; and these "are but symbols of the Unknown Reality." Mr. Spencer disclaims all positive conclusions for materialism, or for idealism? True. But he shuts us up to the two alternatives of absolute materialism, or absolute idealism. The only choice he gives us, is between the two forms of pantheism, either of which is practical atheism.

CHAPTER VII.

PHYSIOLOGICAL MATERIALISM.

THE great extension of the department of physiology, especially as combined with the doctrines of comparative anatomy, has occasioned another school of materialism. Its advocates are in full sympathy with the Sensualistic philosophy, and with the recent evolution doctrine; and when they attempt to systematize those functions of the human being which we call mental functions, their method is precisely that of the Sensualist. This movement of opinion is not new or peculiar to our own age; but had, in the last century, an advocate at least as ingenious as any of the recent, in Hartley. The result of physiological materialism is also to recognize no other mind than nervematter. It begins with these facts asserted by comparative anatomy: that as we proceed with dissections of animal bodies, from the lower to the higher species, wherever we reach a more complete, or better developed nervous system, we see in the living animal abler instincts and fuller powers. Those species which have least nerve and brain, have also the fewest and poorest instinctive powers. Those which approach nearest to man in development of the brain, and completeness of the nervous system, come nearest to him in intelligence. Hence, they attempt to draw the inference, that this nerve-matter is the mind-that thought, feeling, and volition are but refined, perhaps, inexplicable molecular functions, or results of such functions, even as muscular contractions are.

The same conclusion is attempted to be drawn from observations upon the human brain and nerves. Thus: it is claimed that when certain injuries are inflicted on the brain, as long as they continue, all mental functions are wholly suspended. If the nutrition and stimulation of the brain by a circulation of nutritive blood is impaired, the powers of thought are impaired; if the circulation is enriched, the vigor of mind is increased. Again: it is held that molecular functions of brain attend all the abstract and subjective processes of thought, just as truly as the sensitive. It is supposed that brain-action must accompany the abstract conception of God, of vacant space, of eternity, in the man who meditates with every sense closed, as truly as it attends the hearing of a trumpet, or sight of a landscape. This is inferred from the fact that the passage of such inward thoughts moves the features. This change of countenance would not occur, they argue, unless the muscles were moved by their nerves: but these nerves radiate from the brain. Again: they profess to have ascertained that the continued activity of the mind in abstract thought increases the amount of certain phosphatic salts excreted from the nerve tissues, and thrown out of the body by its emunctories. The inference from this is, that molecular action must be greater in the brain during, and by reason of, the mental exertions. Does not the correspondence of these facts, asks the materialist, point to the conclusion that mental activities are nothing else than molecular activities of nerve-matter?

Yet more ingenious surmises are drawn from certain automatic actions of our limbs, and from experiments' upon the relations of the different masses or organs of the brain by vivisection. When men walk along the way, occupied by thought or conversation, do their minds emit a distinct volition for every movement of each foot? Especially when one continues to walk on, after he is wrapped in profound reverie, who can be-

lieve that each motion is prompted by a distinct mental volition emitted by the spirit, when consciousness wholly fails to testify to its emission? It is inferred, therefore, that the nervous matter in the sensorial centre has an automatic power of sending its motive influence down to the muscles, without the perpetual, immediate, and voluntary supervision of the mind. This result materialists suppose to be favorable to their conclusion.

But let us look a little more closely at that complex nerve-organ usually called the brain. It is found, on dissection and experiment, to be not one, but three organs; all, indeed, alike in being composed of nervematter; yet distinguishable in place and function, and each of the three complex. First, at the base of the brain, or just over the spot at which the spinal cord enters the bottom of the skull, is a small, but complicated, body of nerve-matter, from which the spinal cord descends as a species of narrowed continuation, and to which all the different nerves of sensation directly converge. From this same centre all the efferent nerves of motion also diverge, the most of them through the spinal cord. This cluster of ganglions is evidently, in the immediate sense, the sensorium, the centre of sensations. Comparative anatomy shows that it is the rudimental source of brain-structure; for as observation descends from man to less perfect animals, this cluster is still there, at least rudimentally, while the two other clusters of ganglions disappear more and more the lower we go. In man and other higher animals there lies, behind the sensorial centre, a mass of nerve-matter called the cerebellum, which experiment and comparative anatomy seem to indicate as having no necessary connection with mental processes, but as a nervous store-house for the species of nervous influence which the sensorial centres transmit to the muscles. On the top and in front of these two smaller organs in the human skull

lies the largest organ of all, the cerebrum, or brain proper. This consists of several distinct lobes, arranged in two hemispheres, the whole composing the great mass which mainly fills the skull. It is formed of soft nerve-matter, with the vesicular substance bearing a larger ratio to the fibrous than in the spinal cord, and even lavishly supplied with blood. It also has its numerous fibres, which seem to converge towards the neck or joining-place, where it connects with the sensorial cluster beneath, even as the various nerves from the limbs and chest and organs of sensation converge upwards into the same sensorial cluster. To the cerebrum no nerve of sense or motion runs directly! It has no feeling, and can be sliced away by the surgeon, without the creature's knowing it, save as one knows when his hair or nail is cut. It has been found not necessary to the functions of animal life! for, provided it can be removed without fatal lesion of the other vital organs. and especially of the sensorial cluster just underneath, the creature lives on without any cerebrum—breathes, eats, and digests food, just as before. But, on the other hand, let this great cerebral mass be cut away or disorganized by disease, or even unduly compressed, then mental functions are at once interrupted. On the other hand, when the anatomist's knife interferes with the sensorial cluster, the vital functions, seemingly so independent of the cerebrum, are at once interfered with. and the slightest wound of the central nucleus of that cluster is instant death.

Such is a brief view of the relations of the three organs. From this the materialists would have us believe that thought is as truly a nerve-function as the molecular affection of the sensorium, as brought to it by the afferent or received from it by the efferent nervous fibres. The matter affected, say they, is of the same kind; why not regard the function as the same? Psychologists appeal to "consciousness" to reveal to

them the functions and nature of mind. Why not regard consciousness itself as nerve-function? If mind were a different and independent substance from brain, would not its consciousness reveal to it the interaction of brain as a distinct substance and subordinate instrument, even as consciousness shows to us the fingers by which we execute a conscious volition or derive a tactual sensation?

I have thus stated the main grounds of the materialistic hypothesis, as they are drawn from physiology, and advocated by such writers as Huxley and Flint; and I have allowed them at least as much plausibility as they are entitled to claim. I will only add here, that in the judgment of still more learned physiologists, this conclusion is only plausible, and not true. Thus, Virchow, of Berlin, who cannot be suspected of sharing any theological prejudice, is quoted in "Nature" of November, 1874, as saying: "Of all kinds of dogmatism, the materialistic is the most dangerous, because it denies its own dogmatism, and appears in the garb of science; because it professes to rest on fact, when it is but speculation; and because it attempts to annex territories to natural science, before they have been fairly conquered." Dalton says: "The hemispherical ganglia are simply the instruments through which the intellectual powers manifest themselves." Draper not only asserts the immateriality of the mind on grounds of common sense and sound philosophy, but he founds an ingenious physical demonstration on the relation of the cerebrum to the sensorial cluster, to prove that mind is a substance distinct from brain. Dr. W. B. Carpenter, the most profound and voluminous English writer on the physiology of man, is a firm believer in the spirituality of the soul and of God. Says Dr. James L. Cabell: "That cerebral action accompanies all mental action; this is absolutely all that physiology has rendered probable. It has not demonstrated nor rendered probable the position that cerebral changes precede and produce mental states. And, even in the case of the perceptive faculties, how can physiology ever bridge over the chasm between the final physical antecedent, the molecular tremors of the organic instrument, and the succeeding incongruous phenomena of perception and thought? Whatever discoveries the physiologist as such may make, there must always remain this mystery, which it is an impertinence for him to undertake to solve."

CHAPTER VIII.

SPIRITUALITY OF THE MIND.

THE Sensualistic philosophy of our age has now passed before us in a brief, but faithful review. Let us compare it with the same system in the eighteenth century. We have seen this doctrine recommencing in the early part of this century with Mr. James Mill, the Condillac of English philosophy, and supported by the talents of his more influential son, J. S. Mill. It has regularly fulfilled its destiny, in passing, in the hands of the Evolutionists, into materialism, and in those of Büchner and his supporters. into avowed atheism. If history has any lessons, and if moral causes have any regularity, nothing is lacking but the further diffusion of the doctrine to give us again its legitimate conclusion, a nineteenth century "Reign of Terror." International Communism has, indeed, already given a prelibation from the pit, in its short-lived reign in Paris; and this society is the avowed patron of this animal philosophy. If anything can be done, then, by perspicuous and faithful criticism, to expose its groundless pretensions and destroy its credit, he who accomplishes this will be rendering a priceless service to humanity, to just legislation, to sound morals, and to Christian theology. The conclusion to which this false philosophy sought to lead us, in the last chapter, naturally demands our first attention. For it seems. necessary that we attempt to settle the question whether man has a Mind (and not merely a set of organs), before we examine the powers of that substance. We must

proceed next, then, to show that the mind is a distinct spiritual substance, and to examine and refute the pretended grounds on which materialists impugn this conclusion of the almost universal common sense of civilized men. The method of the remaining criticism will be independent of the order of our previous review. I shall endeavor to advance, in my own arrangement, the correct doctrines of philosophy as to the origin of our cognitions, indicating, as I go along, their application to the refutation of the various errors.

The science into which we are about to enter will probably never be an exact one. The Christian believer may hence raise the question: Will it not be better, then, to draw our creed as to the soul's nature and destiny, from the "more sure word of prophecy?" I reply with an emphatic affirmative, and nothing can be farther from my thoughts than to offer him mere philosophic demonstration in lieu of the authority of Revelation. There, the spirituality of the soul, its immortality, its free-agency, its responsibility, the originality of its moral intuitions, are all infallibly taught. The Christian needs no better support for his philosophy, and he knows that he can nowhere find so good a one. The history of opinion has taught us too clearly the uncertainties of human speculation on these abstract subjects; involved as they are with the keenest prejudices and interests of man's passions and pride. While sound thinkers are substantially agreed upon the great outlines of philosophy, in details, there is difference among even them; and to the vagaries of false philosophy, there seems no end. Here we have experimental proof that the powers of the human mind are imperfectly fitted for these inquiries. But the infinite Mind. because it is infinite, can communicate its testimony to the finite on any subject which does not necessarily transcend it, in a way perfectly conclusive. The unspeakable advantage of revelation over human science

here appears from this: that the problem of the verification of a testimony from God to us, is a single problem, perfectly definite, and perfectly simple to the right heart; a problem to which man's powers are fully competent, provided only God presents His credentials. When that one point is settled [that God has presented His credentials], our progress is safe in His teachings. We have only to interpret them candidly, and we are on infallible ground. But the problems which philosophy presents to the mind of man are manifold, abstruse, and sundry of them wholly above his grasp. What, then, is the proper relation of philosophy to Revelation? It is obviously that of an obedient and grateful handmaid. We are not to bend God's testimony to our reasonings, but to bend them to His testimony.

The question then recurs: whether philosophy should have any value with the Christian believer. The answer is, that it has a subordinate value. It is useful even to him who possesses the divine doctrines, to see the concurrence of man's own intelligence, rightly exercised, with the Infallible Intelligence. But, second, there are, unfortunately, many who reject the better guidance, and are unwilling to learn anything from it. If we can induce these persons to open their eyes to the heavenly light, by showing them how the feeble beams of human reason ought to shine towards it, we have done them service. Or, if we can silence by the feeble authority of reason, cavils which only had the seeming support of the same weak authority, we have done the cause of Truth a service. This legitimate attempt, to make philosophy the handmaid of Christian theology, has been sometimes misunderstood, as though it implied that the validity of theological conclusions was dependent on the methods of philosophy. It has even been charged against the philosophic theologian, that he thus staked all upon his philosophy, to such an extent that, supposing his philosophy dissented from,

his whole theology would lose its validity along with This is unjust. The theological conclusions, if correct, rest upon the divine testimony. The student is not dependent upon the acceptance of any philosophy for the power to construe them aright. The faculties which the Maker placed in him will ensure that, if he allows them to act candidly, whether he has a psychological theory of his own faculties or not. The young man is not dependent upon a technical knowledge of anatomy, for power to use his limbs in the gymnastic exercise; nature is his teacher here; she will cause tendons and muscles, of whose existence he is ignorant. to obey his volition implicitly. Is, therefore, anatomy valueless? If those muscles are wounded or diseased: if an indiscreet or malicious master is about to summon the muscles to exertions which will be found unnatural or destructive, then anatomy becomes valuable.

In proceeding to test the nature of the something in us which thinks and wills, by the verdict of consciousness, I shall assume only what is granted on all hands. Human beings have processes commonly cailed knowledge, affections, and volitions. It is by consciousness that we become aware of these in ourselves. So far, all concur. But what is consciousness? Let us so define it as to omit all the vexed questions, and to include in our postulated facts of consciousness, nothing except what all parties grant. Whether consciousness be more than this, or not, it certainly includes this: a cognition which the something that thinks has of its own thoughts, feelings, and volitions. So, we need not raise the question whether our minds have any modifications which remain out of this self-consciousness. I may safely claim this of all parties: namely, that no mental modification can be so in the mind as to be subject of observation and inference, without being within the light of our self-consciousness. Again: no one disputes the validity of the testimony of consciousness, as to the

fact that the mental state, or act, of which he is conscious is really in his mind at the time he is conscious of it. There may possibly be debate of the question whether he construes that mental state, or act, aright; of the question whether his mind had it when it was conscious of having it, it is impossible to doubt. Once more, since no state, or act, can be so in the mind as to claim a share of the mind's attention, save as it is in the sphere of consciousness, it follows that we must be equally indebted to this one faculty for our cognitions of the objective and the subjective, so far as we are entitled to any. If this faculty is trustworthy within any proper limits, then it must be held as trustworthy everywhere within those proper limits. It is clear, then, that the subjective testimonies of consciousness are not to be rejected as invalid, merely because subjective. Consciousness itself is subjective. Hence the materialist who accepts the objective perceptions seen in consciousness with unquestioning confidence, is not to be allowed to dispute its subjective cognitions, merely because they are subjective. At this point, we may see how erroneous is the assumption so quietly made by the Sensualistic philosophy, in its profession and claim of empiricism. It requires us to base everything on observation; and it is right, so far. But when it then tacitly assumes that only objective facts in consciousness are observed experimentally, it makes a claim as preposterous as sweeping. For it will appear that the subjective cognitions revealed in consciousness are even more truly facts observed, or experiential, because it is only through these that the objective become experiential.

The psychological argument for the spirituality of the mind, from the facts of consciousness, is evidently the conclusive and legitimate one. For, let the supposition that man may possibly have an independent, spiritual mind, be once made, and, of course, sensuous

evidences against it cannot be conclusive. For, by the very definition of spirit, as substance that is simple, monadic, indivisible, unextended, devoid of sensible attributes, we have no right to expect to detect its presence or absence by direct sensation. Hence, when the materialist argues that "science" (meaning thereby exclusively the science of sensible phenomena), "tells him nothing of spirit;" I reply: Of course it does not. But if he argues thence that there is no spirit, he is as unreasonable as though he would decide whether a given crystal vase contains atmosphere, by eye-sight and touch, and object that the vessel contained no color and nothing resisting. Of course it does not: for the definition of atmosphere is a gas absolutely transparent, impalpable, and colorless in limited masses. So, other faculties than the senses must decide whether there is a spirit in man; for spirit by its very definition is devoid of sensible properties.

The chief evidence of the soul's spirituality will be found to be, when inspected, intuitive. Man only knows usually as he is conscious of what he knows. His consciousness implies a being which is conscious. Hence, man's knowledge of himself, as conscious, thinking substance, is à priori to, though implicitly present in, all his other thinkings. He knows his own thinking self first, and only by knowing it knows any other thing. In other words, my having knowledge, sensitive or other, implies the Ego that has it. I can only have perception of the objective by admitting the reality of the subjective. I cannot construe to myself any mental state without postulating real being, a subjectum whose the state is. So, the sensations from the objective side we are necessitated to refer to real, objective being, the non-Ego. The non-Ego is only known by having admitted the reality of the Ego. The Scientific American once remarked that, although perpetual motion could be demonstrated to be impossible in a machine of human

construction; there are always a good many people busy in inventing perpetual motion. That journal recommended the following method of finding the perpetual motion to such as are determined to pursue the inquiry; and it assured them that it would find it fully as effectual as any, and much cheaper and simpler. Select a large tube, with handles. Place it in the middle of the floor, and let the operator get into it, and lay hold of the handles. When he lifts himself thus to the ceiling, he will have perpetual motion. It is by a parallel method that the materialists proceed with their argument. It is a similar species of logical tub-lifting, burdened with the weight of the lifter's person. The reality of Spirit can only be taken away by taking away the very cognition on which the materialist stands: that consciousness, namely, of the Ego, which is à priori to his knowledge of matter.

'But may we not distinguish the Ego from the non-Ego, and yet think them both matter? I reply, No: because in the very recognition of the two a contrast arises between them before the reason, which is inevitable. Every act of consciousness is seen to imply, upon inspection, the singleness of the mind. It learns the qualities of various objects by sensations exceedingly various, yet all are inevitably referred to the same knowing Subject. The Ego who perceives by touching, is all the time identical with the Ego who perceives by tasting, smelling, hearing, and seeing; and it is the same, again, with that Ego who afterwards reflects upon all these sensations; and still the same, who feels towards the objects. The knowing Mind remains identical through all these diversities. But all material objects exist before us in plurality. The simplest material substance is constituted by an aggregation of parts, and may be conceived as divided. The lightest has some weight: the smallest has some extension; all have some figure. But consciousness says that the

thing within us, which knows, feels, and wills, is simple. These varied modifications which we are necessitated to refer to one subject, we also know coëxist in it without partition or plurality. The subject which conceives is the same that feels towards the object conceived. The agent who hates is the same that loves the opposite object to the one hated.

Moreover, every act and affection of the mind is known in consciousness as having complete unity, and it is impossible to refer any attribute of extension to them even in conception. Endeavor to imagine a concept as round, or ponderous, or colored (as it is a mental act); or an affection triangular, as distinguished from another that is circular; or the top and bottom sides of a judgment; or a volition divided by some tool into halves and quarters; and you feel, inevitably, that the thought is impossible. All the attributes of matter are absolutely irrelevant to spirit and to all its modifications. But, while all our mental affections have absolute unity, we are taught by our senses that all qualities and affections of material masses are affections of their parts aggregated. The whiteness of a wall is the whiteness of a multitude of separate points in the wall. The magnetism of a metallic bar is the magnetism of a multitude of molecules of metal. The properties may be literally divided along with the masses. The materialistic conception receives a most exact refutation, when we recall the multitude of distinct ideas and feelings stored up in unconscious memory, and the vast difference in number, in dull or youthful, and in great or learned minds. Materialists would claim memory as especially a nerve-faculty, because a blow on the brain so distinctly suspends all its operations, as do certain diseases of that organ. They also cite the case of sensitive ideas lying long in the brain, wholly unknown to consciousness, until some peculiar excitement of the brain stimulates the indistinct marks into recollections.

Must not these ideas have been somehow imprinted on the nerve-matter? I reply, No; but in the spirit. The convolutions of the cortical matter of the brain cannot be resorted to to receive all these marks. For, first, birds have the faculty of memory; but it is stated by anatomists that their brains have no convolutions. Second, the faculty of memory involves very intimately that of association. But the latter discloses ties of suggestion, by resemblance, contrast, cause, between ideas once before in the mind, and other ideas never before in the mind. It is the faculty of comparison which perceives resemblances, and this, as we have seen, implies an intelligent middle term between the ideas compared. This materialist theory can never account for the rise by suggestion of ideas not simultaneously marked in the brain by sensation. We know that the retentiveness of memory is chiefly dependent upon the attention given to the ideas when seen at first. But attention has as its essential element volition, which is a subjective faculty. And, last, the startling rise of ideas, supposed to be long forgotten, out of conscious memory, in some peculiar cases of excitement, make it at least probable that no impression is ever lost. If so, the accumulation has no end in this life; and the materialist view becomes impossible. If the brain, or a part of it, is the something which remembers, how are all these marks distinguishably made on a surface of no more breadth? Why does not the tablet get full? How is it that a mind, like that of Leibnitz, for instance, can still learn more than ever, by reason of all that he has learned? We must bear in mind that, if materialism is true, the viewing of any of these marks, in the act of reminiscence, is some sort of sense-perception, because, on that doctrine, there is nothing else but sense organs, either without or within the skull. How many lines on an inch of surface can sense perceive? That is settled for our eve-sight, the keenest sense known to us, with

geometrical exactness! The supposition of marks imprinted on a material mass or surface is untenable.

Professor Bain, in his "Mind and Body," attempts by many expedients, but vainly, to escape this objection. He assigns the material marks or prints of our ideas in memory, not only to the cortical grey matter of the brain's surface, but to the numerous particles of grey matter, which, throughout the whole nervous masses, he supposes to be the connecting-links of filaments of nerve at their plexuses. He labors to exaggerate the number of these filaments, claiming for each of them the functions of an independent nerve: and he endeavors to diminish the number of the ideas in the largest memory. The fatal chasms in his hypothesis are such as these. It is mere supposition that molecules of the grey matter at the ends of separate filaments receive and retain these permanent marks of previous nervecurrents; no demonstrative proof is shown. Many filaments are agitated to convey a single sensation; perhaps, in some single cases, like a sensation of warmth, hundreds of thousands. The difference of material capacities between the brain of a Cuvier and a clown can never be made to bear a proportion to the contents of their two memories. Here Professor Bain shall support the truth and contradict himself: On page qust he asserts (without proof) that "for every act of memory, there is a specific grouping or coordination of sensations and movements, by virtue of specific growths in the cell-junctions." If so, there must be a direct proportion between the number of these material junctioncells and the number of ideas. But, on page 21st, he confesses that while the brain of the common male weighs forty-eight ounces, that of Cuvier weighed sixtyfour ounces, and admits: "There would be no exaggeration in saying that while size of brain increases in arithmetical proportion, intellectual range increases in geometrical proportion." Then his self-contradiction is

clear, if forty-eight ounces of brain are requisite to give space for the material markings of a peasant's ideas, sixty-four ounces cannot give space for a *Cavier's*.

Now the law of our reason compels us to refer this complete contrast of attributes to a real difference of substance. While we name the Ego, Spirit, we must call the objective something else; Matter. The latter has extension, parts, weight, resistance, figure, and usually color, with other secondary properties. The former has none of these, but singleness, indivisibility, identity. The power in matter is force. The powers in spirit are heterogeneous, powers of knowing, feeling, choosing. The man who thinks consistently, must always be more certain that there is mind, than that there is matter; because the recognition of spirit is in order to the knowledge of matter. Does sense-perception seem to the materialist to give him the most palpable knowledge of the matter external to him? This is only a sensuous perversion of his habits of thought. For he has only been enabled to construe that perception at all, so as to make it a datum of valid knowledge, by first crediting the intuition of consciousness. But that has also revealed to him the perceiving agent as contrasted with the object revealed. How unscientific is it, to use the intuition in her second, and refuse credit to her first testimony? We should rather say: Falsus in uno, falsus in omnibus. Hence, while pure idealism and materialism are both errors, idealism is the less error of the two. It outrages our intuitions on one side, materialism outrages them on both. This partial community of error we have seen curiously illustrated by the constant tendency of the Sensualistic philosophy from Condillac to Herbert Spencer, to veer from materialism to idealism.

In the next place, materialism contradicts our immediate consciousness of free-agency. Let us first inspect that consciousness. He who imagines that it is nothing

more than opportunity for the muscles to effect, without obstruction, the impulses from within emitted by the something that thinks, has wholly mistaken the case. There is, besides, a conscious free-agency as to emitting the impulse from within. The very essence of the case is, that the something which thinks forms selfdeterminations. To be sure of this, one needs only to listen candidly to the testimony of consciousness. Now this unique function gives us again a conviction of the unity and simplicity of the mind; for we see intuitively that the being which emits this self-determination is a unit of power, acting in every volition indivisibly. Let any man watch the volitions which pass through consciousness; they are flashes of spiritual power all emitted from a focal point. Experience has now shown us two different (and often rival) classes of effects; those of material forces being one class, those of free choice the other. Force is blind, unintelligent, and necessitated. Choice is intelligent and free. Whenever we exercise moral and rational self-command against the attraction of some vivid impression on the senses, we have a clear evidence of the subjective and spiritual seat of the will. That vivid sense-impression is, according to the materialists, a material affection. There are many cases in which this is not only the last, but the most potent antecedent in the brain. Why, then, does not volition follow as a physical consequent? Yet we know that we often present a successful rational resistance. The same species of proof is presented by the somnambulic state, and by some others. In these states, the nerve organs, including both those of sensation and motion, act automatically. The somnambulist walks, and, perhaps, climbs, with perfect accuracy. But as soon as the mind awakes, or returns to its normal control over the nerves, totally different volitions assume direction of the whole man. Now, it is the somnambulic state which shows what the nerve-organs can do of them-

selves. What is this new power which comes to the helm, the instant the mind resumes the sway of the body? It is something more than nerve-matter, spirit. Whenever matter is an objective point of free choice. we are conscious that free-agency and material force become opponents; the intelligent purpose of the volition is to overcome some material force; and the necessary nature of the material object is to present a passive resistance, up to its natural limit, to the freeagency. The reason refuses to think any effect without an adequate cause; and it is impossible to refer these contrasted effects of force and free-agency to a common cause. Hence, the something which wills cannot be the something which force inhabits; matter. This view as much excludes nerve-matter from the claim to be the substance which wills, as it does bony matter; for the actions of nerve-matter, so far as known by the senses, are only material; that is, unintelligent and necessitated. From this point of view we see that the correlation, or as Spencer more perspicuously calls it, the transformation and equivalency of material force and mental will, is impossible. That false dogma is unquestionably the corner-stone of the evolution philosophy, as Spencer clearly enough saw. For, if there are two species of power in the universe, spiritual and material, that unification of sciences which he demands is out of the question. Again, if force and volition cannot be proven equivalent and transmutable powers, then, however Darwin might succeed in evolving higher animal forms from the lower, the evolution of man from animal progenitors, and the exclusion of a spiritual God from his creation, is all undone, because the mind is the man, and the evolution theory would leave the more essential part of human nature unaccounted for. This, then, is the key of the battle-ground! Hence, the importance of defending it triumphantly.

I resume that defence, then, by claiming that any man's consciousness, faithfully inspected, reveals the essential difference between material force and volition, which I have claimed above. Effects so heterogeneous cannot be correctly referred to the same cause. But I argue, farther, that volition originates material force. This fact is, indeed, the pretext of the evolutionist, for his assertion of the identity of the two; but he misunderstands it. We perpetually see material force originating in volitions of spirits, but we never see volitions originating in material forces. Nay, but, replies the Evolutionist, is not sensation the result of some species of impact of matter upon the nerveorgans? And do not sensations cause volitions? To the latter, I reply, No; they only present occasions for volitions, which are, in truth, caused from within. Let any one honestly inspect his own consciousness, and he will see that the activity of his soul in volition is from within outward; not from the object inward; he will see that, granted the object before the sense-perception, it is the soul, the something which thinks, that elects to reach towards it, or not. The utter mistake of endeavoring to make the volition the mere, material "correlate" of the force expended by molecular impact upon the nerve-organ of sense, is thus displayed by Dr. Stirling, of Edinburg. Let us suppose that an insult is shouted in the ear of a choleric Briton. He flushes with anger, and his arm is nerved for a blow. The muscular force in those muscles, says the Evolutionist, is the transformed and equivalent force of the molecular impact of the acoustic waves upon his auditory nerve. Let us see; a very simple experiment will test this. Let us suppose that the sturdy Briton knows only his mother-tongue; and then shout the insult in French. No flush burns in his face; no muscle is moved to strike. But now let a bystander translate the insult into English, reciting it in the softest tone,

and the forcible manifestations of anger are at once made. Why this? Evidently because sound was not even the occasion, much less the cause, of resentment, at all: but an idea, a thought, of which the sound was the symbol. The occasion was in the idea alone. Upon apprehension of that, resentment arose; when that failed to reach the mind, there was no effect. So, the evolutionist reminds us that the caloric which warms the cheek of modesty with a blush, is the same agent which expands the steam in the machine. Very true: but it is only a thought which can prompt the chaste soul to send the mantling blood into the warm cheek. Without the idea, the same acoustic waves, or refracted rays on the retina, provoke no blush. I remark further, that if volition is transformed material force, then one ought to be regularly measured in terms of the other. But this is not so. One man, with but a languid volition, emits a muscular force which moves a mass that another cannot move by the most intense energy of his Worse than this: we see one when partially alarmed by danger, but fresh in body, by a comparatively slight effort of volition, moving his limbs over the ground like a deer; but later in the race, we see the same man, when death is close upon his heels, and when his whole will is stirred and nerved to agony, scarcely able to drag his feet a few inches. Force is not the correlate of will; but it is a heterogeneous power.

I return, then, to the assertion, that while material force is not transformable into volition, volition is an original spring of material force; and we shall discover, the only original spring of it. Passivity is the essential attribute of matter. This is indisputably implied in the law of *inertia*, and also in the law of motion. Matter only receives force, and transmits, and obeys it. It is in itself as incompetent to originate force, as it is to resist it. Is, then, force from eternity to eternity, as Spencer would have it? We shall see in a moment.

Whenever we have an opportunity to trace any series of forces to its origin, we find it always in the volition of a living thing. Does one hear, for instance, a cannon-ball hurtling through the air, and see it bury itself with violence in the earth? Let him ask himself whence the momentum of this ball? From the explosive force of the gunpowder? Whence that explosive force? One answer is: from the human providence of its manufacturers. Another is: from the impact of fire, starting the chemical re-actions of its ingredients. Whence the fire? From the friction of a match. Whence that friction? From a quick motion of the gunner's arm. Whence that motion of the arm? From a volition of the gunner's mind. Then we reach the beginning of this series of causes; for this volition, though occasioned by something out of that mind, is self-caused, an original emission of the spontaneous soul. Such is the original to which all series of forces are traced, which are not natural. Here, then, we have an analogy which begets the strongest probability, that all natural forces had the same origin in the will, namely, of the supernatural mind, God. The only apparent escape from this conclusion is in Mr. Spencer's assumption that force is from eternity to eternity, and so has no origin at all. But, first, this is inadmissible, because it gives us an infinite series of dependent effects, without any independent cause, which all philosophy rejects as an impossible proposition. It is inadmissible, second, because the effects disclose at every step the richest intelligence, while mere force is blind. It is inadmissible, third, because this "persistency of force," in this sense. must also imply the absolute immensity of force and matter, as well as their absolute eternity. Let it be remembered that the evolutionist holds, that matter is the only habitat of force; for it is an affection of matter alone, and not of empty space. He also admits, with us, that matter cannot be absolutely immense, or

literally coëxtensive with infinite space; because figure, dimension, and limit are inseparable from all our conceptions of matter. And last: it is impossible, as Mr. Spencer virtually admits, that a congeries of bodies finite in extent, and contained by nothing but empty space, can maintain his idea of the persistency of force. In every case of material force, action must equal reaction. How can this equal re-action be given back to the forces on the edge of this material universe, where there is nothing to re-act? Take, for instance, that form of force known as caloric. All the caloric radiated out from the masses of matter on the edge of the universe, into empty space, can find nothing to radiate it back. Here Mr. Spencer's universal first truth, the persistency of force, absolutely breaks down. Matter cannot be eternal, or immense; God can. Hence, we are shut up to the conclusion to which every experimental analogy led us, that spirit is the only adequate ultimate source of forces; and so, the presence of the forces of nature demonstrate the existence of the Supernatural Spirit, instead of superseding it.

As concerns the correlation of material forces among themselves, we feel no motive, after so fully exempting the power of rational volition from their class, to assert or deny. But fidelity to the methods of sound science constrains us to remember that the doctrine of the correlation of the physical forces, even, is only a hypothesis. It has never received that verification so necessary to its demonstration as an established scientific truth, by the actual ascertainment of the unchanged equality of measurement for one force, and the other, into which it is supposed to be transformed. Such a verification, indeed, the advocates of the doctrine admit to be forever impracticable. Again, has the force of gravity ever been correlated with heat, light, and electricity? If so, why has any mass the same gravity, while its calorific and electrical conditions are most violently changed?

That this hypothesis is not yet proved, appears from the ease with which a counter-supposition may be made. which seems to satisfy the known facts at least as well. Let it be supposed that each material force is a distinct and permanent property of the kind of matter which it inhabits, and potentially always present in it. This state of mere potentiality is an equilibrium produced by the resistance of another competing force. Then, all that will be necessary to produce the action of the former force, will be to release it from this counterpoising force. Its return to the state of rest, or potential presence, would be caused by the rise of a resisting force, again, sufficient to counterpoise it. Every physical effect, then, is the result of an interaction of two or more single forces. Each force maintains its distinct integrity, both while active and potential. The advantages of this hypothesis are, that it might be supported by a multitude of physical facts, and is strictly accordant with a philosophic view of causation. According to this view, there is no transformation of one force into another, but each is and remains the species of force it was at the beginning. The seeming transformation of one species into another is but the passage of the former from its active to its latent or potential state, and the release of the latter out of its potential into its active state.

But, be this as it may, the evidence is totally lacking for the transformation of any inorganic force into the vital. And between both these and the spiritual there is a "gulf-fixed," which no man has passed or can pass.

Materialism contradicts also the testimony of consciousness as to our moral judgments. This convinces us that matter, if a cause, is an involuntary and unintelligent cause. But we know that we are responsible, and that this unavoidably implies a rational spontaneity in acting. No man deliberately thinks of holding a blind, material force to a moral responsibility. But this

conviction of responsibility in conscience we shall find universal, radical, unavoidable, and intuitive. It is impossible for a man reasonably to discharge his mind of it. He cannot think the admitted wrong as meritorious as the right, and the admitted wrong-doer irresponsible for his wrong, like a rolling stone, a wave, or a flame. These facts of consciousness compel us to admit the existence within us of a substance different from matter. Had man no spirit, there would be nothing to be accountable. Were there no Spirit above him, there would be none to whom to be accountable. Were either true, our nature would be a lie and moral knowledge impossible.

The attempt is made to meet these arguments by saying, first, that consciousness is not to be trusted. Consciousness, say they, is incomplete. She gives no account of the subjective acts and states of infancy, and an incorrect account of those of the mentally diseased. She usually tells us nothing of the large latent stores of memory. She is entirely silent as to any interaction of the nerve-system and the spirit, of which, if there is a spirit, there must be so much.

But to what does all this amount? Consciousness does not tell us all things, and sometimes seems to tell us wrong. Were this granted, still the stubborn proposition would remain, that if we cannot trust consciousness, we can have no ideas. The faculty which they would exalt against her is sensation. Do the senses tell us all things? Are they never deceived? And does sense give any perception save as it is mediated by consciousness? Enough of such special pleadings! That consciousness reveals nothing direct of the interaction of the spirit and the nerve-organs, is precisely because spirit and matter are causes so diverse. So that this fact contains one of the most conclusive proofs against If our conscious intelligence could be materialism. simply a function of nerve-matter, then it would be very natural to find every link of the nerve-action represented to us mentally. But because conscious intelligence is not a material, organic function, but is the free action of spirit, a substance and cause wholly heterogeneous from matter, therefore it is that there is naturally a chasm of mystery just at the connecting-link between nerve-action in the sensorium and the idea in the intelligence, and between volition in the spiritual agent and contraction in the efferent nerve. Just there is a relation, which the omniscient Spirit was able to institute. Sense cannot grasp that link, because the interaction is no longer material. Conscious intelligence does not construe it to itself, because it is not merely spiritual.

Again, it is asked: If there must be an entity within us to be the subject of consciousness, why may not that be the Brain? One answer has been given above: That, while the properties and functions of brain-matter are material, qualified by extension and divisibility, those of consciousness are spiritual, simple, and indivisible. Another answer is, that I know my own brain, like other matter, like my eye-ball, is also objective to that in me which thinks. Of the most internal head-ache which men ever have, they say: "My head hurts me," as naturally and truthfully as they say: " My foot hurts me." The "Me" that is hurt is different in each case from the organ which hurts it. How do I know that I have a brain? By a valid analogy from the testimony of anatomists as to the skulls of all other men. testimony is the witnessing of a sense-perception, which the anatomists had, upon opening those other skulls; that is, an objective knowledge. They tell me that if it were proper for me to submit to the operation of trepanning on the forehead, they could enable me to see my own brain in a mirror as well as I now see my eye-ball in the same way. Who would it, then, be, who was looking at that brain, watching perhaps the pulsations of the blood in it? I would be looking. Then, is the brain I? The only notion which any man can construe to himself touching his own brain is, that it is the necessary instrument by which he thinks, not the Ego which thinks.

Another answer to this supposition is suggested by Sir B. Brodie, from the dual structure of man's nervous system. Man's nerves, like his limbs, are all in pairs. The cerebrum has its two hemispheres. One side can be, and often is, diseased alone; when the opposite members of the body are paralyzed. Now, if the brain is the mind, how is it that the mind, like the brain, is not dual? Why have we not normally, a dual consciousness? Why is it that cases of derangement are not usually, like paralysis, cases of mental hemiplegy?

Is it not remarkable, again, if the brain is the mind, that the greatly largest organ in it has no sensibility? No afferent nerve of sense runs directly to it, or penetrates it. Although composed of nerve-matter, it exhibits no sensibility to pain, or other impressions. This proves, at least, that living nerve-matter is not necessarily, as such, endowed with sensibility. The natural inference would seem to be, that something additional to nerve-matter and vitality is necessary to furnish conscious sensation, even. We are shut up to the conclusion that the brain itself is not the intelligent agent, but its instrument.

The physiology of the nervous system of man suggests a curious argument from the remarkable arrangement of the parts within the skull. Every experiential fact bearing on this branch of zoology tends to prove that these nerve-masses within the skull contain the centre of the system. Somewhere within these masses is the capital of the microcosm, man. Thither all the afferent nerves converge: thence the efferent nerves diverge. It is to some point within the skull that all the sensations from without are reported, as to their

headquarters; it is from some point there that the volitions are despatched outward to the members. Now we saw the arrangement of those nerve-masses among themselves. There are three bodies, the sensory ganglia at the base, which form a comparatively small cluster: the cerebellum at the rear, also a comparatively small mass; and above, the cerebral hemispheres proper. which are united intimately together in their commissure, but have no connection with the other two, except by the species of neck, which unites them to the sensory ganglia underneath. Every fact of physiology shows that this cerebrum subserves some all-important function in man. It is nerve-matter most highly vitalized; it is lavishly supplied with nutrition by blood, clearly showing that it has a great deal of work of some kind to do; it is in quantity greatly larger than both the others together; it is penetrated throughout by nerve-fibres, which sub-divide and diverge to every part of its corrugated surface, and converge towards the point of union with the sensory ganglia at its base. Yet, in itself, it is incapable of sensation from without! And to it runs not a single nerve directly, from any organ of sense, or any muscle! What is it? What does it do? The urgency of this inquiry and of these facts, has caused Dr. W. B. Carpenter, with other eminent physiologists, to say: the cerebrum is evidently the "organ of man's internal sense," as the sensory ganglia, with their extended ramifications to the various limbs and organs, are the "organ of external sense." We see, then, that man's nervous system has a dual division in two directions, lateral and longitudinal. Laterally, it is divided into pairs, which run alongside of each other, until they branch off to the several limbs and members. Longitudinally, it is divided at the base of the cerebrum into two ends. The lower end diverges from the point of division, sending its branching nerves downwards and outwards to the bodily organs, the

members and the whole surface, and thus connecting man with the outer world. The upper end, the cerebrum, also sends its fibres branching and diverging upwards from the point of juncture towards the superficies of that organ. But now note the peculiar fact, that this latter superficies is locked up in a rigid, bony case, is thus completely shut out from all external causations, and, in fact, has no surface organs whatever, for receiving them! Nature has here taught us, indisputably, one thing: that whatever are the agencies of the cerebrum, they are prompted from within, and not from without. There seem to be but two possible hypotheses as to what this agency is. One is the rational conclusion that man has a distinct spirit, which is the Ego, the true self, the subjective, intelligent seat of spontaneity and mind-power: and that this peculiar, this grand nerve-organ, this cerebrum, thus insulated from all external functions, is the connecting instrument between this spirit and the nervous system. Its corrugated, vascular surface is at the opposite pole of the double nervous apparatus. The one pole is the extremities of the nerves, in the skin, the retina, the tympanum, the nostrils, the palate; and this pole is acted on by the external world; "the objective." The other pole is locked up from the external world in its case of bone, and is acted on by the spirit, "the subjective." In the meeting of the two members of the total nervous system, is consciousness, and effective volition, while man's spirit is incorporate in a body. The other supposition, compatible with materialism, would be that the cerebrum was only a species of reserve battery, or receiver, for either generating or storing up molecular nerve-power, from which the sensory ganglia might draw a species of reinforcement of nervous energy for their efferent work. But this would reduce all man's actions to the class of automatic, reflex nerve-motions, merely such as are excited by pricking in the motor-

nerves [and in many animals may be excited after death]. This last conclusion is contradicted by the very anatomy of the human system, by observed facts, and by the testimony of physiologists, who demonstrate that the cerebral functions cannot belong to the "reflex" class. We thus seem shut up to the former conclusion, that the immaterial spirit presides over the cerebrum, using it as its instrument; as the external world, through the afferent nerves, dominate over the sensory ganglia. Some eminent minds have, indeed, regarded it as inconsistent to travel to a spiritual conclusion by a physical argument. To me this does not appear a necessary solecism. The student will weigh the reasoning, and will remember that it is not our essential argument: our demonstration stands firm without it. Its interest is in its confirmation of the other arguments, by its surprising concurrence of structural arrangements.

We have argued from the unity of consciousness and all our mental functions. Materialists object that material affections which are not a unity, have this seeming unity to our conception; as a musical tone is to the mind apparently a unity, and yet we know that it is a very numerous series of successive vibrations. I reply: True; the oneness is only in the perception of it; only as it becomes our mental affection does it assume unity. As we trace the effect from the successive vibrations of the musical chord to those of the air, the tympanum of the ear, the bony series of the inner ear, the aqueous humor, the fimbriated nerve, the series is still one of parts. It is only when we pass from the material organ to the mind that the phenomenon is no longer a series of pulses, but a unified sense-perception. This very case proves most strongly the unifying power which belongs to the mind alone. So, when an extended object produces a sensation, though the object perceived is divisible, the perception thereof, as a mental act, is indivisible. It is the mind, and that alone, which is the unifier, because it is the mind which is the true unit.

Bishop Butler grounded his immortal argument for the spirituality of that which thinks in us, partly upon the fact that the mind not only performed acts of senseperception through its material organs, but performed also abstract acts of intelligence, such as the conception of general ideas, and of spirit, and God, independently of all organs of sense. Materialists now object that he was mistaken in his facts; they think they have proved by physiological experiments and reasonings (see page 132) that no mental act takes place, not even the most abstract, independent of molecular brain-action. And this asserted fact is advanced with a triumphant air, as though it destroyed our argument. Turrettin, who used the same argument with that just cited from Butler's Analogy, two hundred years ago, has acutely anticipated and exploded this objection. Suppose it be granted that a molecular brain-action does accompany the mind's action in thinking an abstract thought. as that of God, spirit, self; can a nerve organ give the mind that purely spiritual idea? No cause can give what it has not. How is it possible for an organ essentially material to give a result from which the material is absolutely abstracted? A liver can secrete bile from blood; but the bile is as truly a material liquid as the blood. Hence we confirm the testimony of our own consciousness, that in abstract thought, as in spontaneous volition, the causative action is from the mind towards the nerve organ. The excitement of the nervematter is consequence, and the spirit's spontaneity is cause. In objective perception, the cognition of the new sense-idea in the consciousness follows the excitement of the nerve-matter, in the order of causation. And just so surely, in the case of spontaneous thought, feeling, and volition, mental action precedes the action of the nerve-matter (if there is any) in the order of

causation. So that in the sense of Turrettin and Bp. Butler, these acts of soul are independent of material actions still; and the inference holds as to the soul's distinct existence. Again: let us suppose all that the physiological materialist claims to be true, still the use he makes of his facts in favor of materialism only brings us to the hypothesis of Hartley, with its vibrations and vibratiuncles, which has been doomed to oblivion, as a preposterous solution of the facts of consciousness by three generations of sound philosophers. Error gives us "nothing new under the sun."

But does not mental disease imply that the soul is material, or, at least, dependent on the body? In dotage is not the mind, like the body, tottering to its extinction? If the mind is a spirit, and spirit is a unit, could organic disease possibly take place in it? I reply, that strictly, mind never is organically diseased; but its infirmities are analogous to those which pathologists call, in the body, "functional derangements." It is the bodily organ of the soul's action which is weakened or deranged. This is the conclusion to which the best medical science has come, supported by the experience of the treatment of lunatics. If all our processes of thought and volition are performed, during our connection with the body, through the instrumentality of brain-organs, then the physical disturbance of the latter accounts for all appearances of insanity, emotional or mental, just as readily as a lesion of a nerve accounts for the inability of the man whose mind is perfectly strong and conscious to make his limb obey his volition. It is interesting to remember, also, that the mind is greatly influenced by habits. A very large part of our mental states are either sense-perceptions or have these for their immediate objects. If now the habitual balance of the soul's workings be unsettled, through the distortion or suppression of this important branch of its ordinary actions, nothing is more to be expected than

that its whole action shall be deranged. When the grist is suddenly cut off from the mill, it changes its running. although there is no change of motive power or machine-If a man has been long bearing a heavy burden on the shoulder, the throwing of it off causes him for a time to hold his shoulders unevenly. That which happens in dreams shows that this explanation is reasonable. The mind's action is then abnormal. Every man in his dreams is temporarily and practically lunatic. His judgment is in partial abevance, and the combinations formed in the imagination, and believed by him, are preposterous. It is because the suspension of senseperceptions has thrown the mind's working out of balance. Let the organs of sense awake fully, and the current of sensations begins to flow aright, and the mind is at once itself again. In lunacy, and especially in dotage, ideas gained by the mind before the bodily disease or decline took place are usually recalled and used by the mind correctly, while more recent ones are either distorted or wholly evanescent. The memory of the feeble old man for early events is tenacious and vivid, while for recent ones it is treacherous. But upon either object the judgment is as sound and just as when the man was in his prime.

It has ever been a favorite objection of materialists, that by a parallel argument brutes may be shown to have distinct spirits. I reply, in the spirit of Bishop Butler, that this is an objection ad ignorantiam. If it should result that brutes have souls, perhaps many prejudices would suffer by the discovery, but I see not that any principle of established truth would perish. It is no just logic to urge that our premises may contain some unknown conclusions, when the question is: do they or do they not contain this known and unavoidable conclusion, the spirituality of man? The nature of the mental processes of the higher brutes, especially, is very mysterious. It seems most probable that their

spirits are lacking in moral judgments and sentiments, in the æsthetic faculty, and in the ability to construe the contents of their consciousness to themselves in any rational order. But these are most essential to a rational personality. What is the destiny of that principle which, in the brute, is the seat of sensation, appetite, instinct, passion, associations, philosophy cannot tell us. Only when we resort to revelation, do we learn that the "spirit of the brute goeth downward, while the spirit of man goeth upward." Ignorance here is no argument against the results of positive knowledge elsewhere.

CHAPTER IX.

EVOLUTION THEORY MATERIALISTIC, AND THEREFORE FALSE.

N Chapter VI. I pointed out, that the last hope I of atheism, driven from the postulate of an eternal series of like things begetting their like, was in some theory of evolution, by differentiations between parents and progeny. This fact enabled us at once to assign the proper locus of Evolutionism in philosophy as a scheme concocted in the interests of atheism. Thirty years ago, the anonymous book, "Vestiges of Creation," propounded a theory of evolution. It was criticised and rejected as generally by the Sensualistic school as by sound philosophers. A generation later, the same scheme is revived, and a large part of the reading world is gone mad after it! The "Vestiges of Creation" professed to recognize a Creator and the evidence of His final causes as fully as the theologian, and taught that the powers of evolution in organized beings were originally infused by God, and intelligently directed by Him to evolve the creatures designed. characteristic of the last scheme, which succeeds so largely where the other failed, is, that it discards the teleòlogical conclusion wholly. Is this the cause of its popularity, that it seems to show men a way to get quit of the most perspicuous argument for the being of a God? The coincidence is at least striking. Although Dr. Darwin frequently uses the words "design," "beautiful contrivance," and speaks of organs which are "inorder" to ends, he assures us that these are, with him,

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purely metaphors, and that his law of "natural selection" is perfectly unintentional. It is a law of blind matter. Its results, however complicated and beautiful, are the effects solely of blind chance, acting through almost infinite numbers of trials, and succeeding at times solely by accident. This view does not lead Dr. Darwin to avowed atheism, but this is only his inconsistency. His followers and admirers, such as Tyndal, Huxley, Büchner, Carl Voght, declare, with one voice, that he has made a final end of the teleological argument for the existence of a personal God. They declare that they need nothing but matter, force, a vast duration, and fortuity, to construct the whole universe of worlds. plants and trees, animals and intelligent men. That they understand the real effect of their friend's system aright is confirmed by his ablest opponents, such as Louis Agassiz. These all declare that the fundamental error of the scheme is its omission of the evidence for a designing Mind over the universe.

Atheism and Materialism are twin sisters. This evolution doctrine also leads, like all other atheistic schemes, to the denial of a soul to man. Whatever is in man, Evolutionists hold, was developed out of the lowest rudiment of animal life. Of course they do not think that development originates distinct substances: it merely modifies, increases, or diminishes what was there before. Then, if man came from a mollusk, unless the mollusk had a distinct rational spirit, man has none: he only has the mollusk's organism and habits improved. What room is there for a religion where there is neither soul nor God? A more practical view of this horrible system will doubtless be taken by its vulgar herd It teaches them that they are generically of votaries. They will act as brutes; in this way they will understand their teachers. The demonstration of man's spirituality, given in the last chapter, is complete by itself; and, as such, it utterly overthrows the evolution

scheme, at least as to man. But it is best to add some farther examination of it, to sustain previous conclusions.

As we have seen, Dr. Darwin proposes to trace the human race back, through an ape, to the rudimental form of insect animal existence. He supposes that we shall have to look to a Creator to give us this animated germ to start with. Dr. Huxley adds another step, as we have seen, by finding in the chemical forces forming "protoplasm" a source for both vegetable and animal life in inorganic nature. The Aristotle of Evolutionism, Herbert Spencer, evolves everything from primary dead matter by force acting inevitably and eternally, developing organisms, and then changing them by the reactions of organs and environments. Professor Tyndal comes to their aid with his shallow attempt to rehabilitate the exploded and despised scheme of the ancient Atomic philosophers. It is with this doctrine, as a whole, that we have to deal.

1. To begin at the bottom of the abyss, the atomic theory never was worthy of deliberate refutation, being only a hypothesis forever incapable of verification by any sufficient experiment or observation, either in consciousness or in the sphere of the senses. As such, it never had a right to be entertained, even for discussion. in the forum of inductive science. I will, however, point out a few of the assumptions it involves, which are fatal to its credit. It has never been demonstrated that there are ultimate atoms, possessed of the necessary attributes demanded by this scheme; it is only a surmise from certain chemical facts. Is not H. Spencer authority on this point with his own people? He declares that the argument for the infinite divisibility of matter is one impossible to be refuted by the human reason! Where, then, is the certainty that we have permanent ultimate atoms of the kind Professor Tyndal needs? Again, the latter rejects the conclusions of sound phi-

losophy as to rational spirits and the First Cause, because we cannot picture them in the "scientific imagination." Can he picture his ultimate atom? This atomic scheme must postulate that motion is eternal and intrinsic in the atoms; but sound science tells us that inertia is the fundamental and original attribute of matter: that it moves not, save as it is impelled. This allimportant fact points plainly to the conclusion, that force is originally external to matter, and has been communicated to it from a source external to it; and sound induction from all our experience of originated motion leads to the conclusion, that the only adequate ultimate source of force is in the volition of Spirits. That a fortuitous conjunction of atoms should account for all the marvels of design in the universe, and that a material mass should be endowed with consciousness, reason, and conscience, are difficulties common to this and all the other phases of this philosophy.

2. We advance now to the position of Dr. Huxley, who endeavors to account for vegetable and animal life by the action of the more complex chemical affinities producing "protoplasm." For the physical facts which explode this theory, we are, of course, dependent on natural historians and physiologists. But we are fortunate in having the testimony of many of the most competent and experienced, who declare that the most rudimental vitalized matter which the microscope discloses is not Dr. Huxley's "protoplasm," but a living tissue-cell, with its vital powers of nutrition and reproduction. They affirm also that all protoplasm, or living protein, is not alike in form, nor in constituent elements; and so marked is this, that microscopists know by the appearances of these different varieties of protein, the different living matters whence they came. Then, different vitalities construct different forms of protein out of the same elements. Some forms are entirely incapable of being nourished by some other forms, which

should not be the case were all protoplasm alike. While vegetable vitality can assimilate dead matter, animal vitality can only assimilate what has been prepared for it by vegetable (or animal) life. They tell us, finally, that all *protein* is not endowed with contractility, so that the pretended basis for animal motion does not exist in it.

The seemingly plausible point in this chemical theory of life is the attempted parallel between the production of water and protoplasm. Asks Huxley: "Why postulate an imaginary cause, 'vitality,' in this case, rather than 'aquosity,' over and above chemical affinity, in the other?" The answer is, that this analogy is false, both as to the causes and the effects in the two cases. In the production of water from the two gases, the occasion is the electrical spark; the real, efficient cause is the affinity of the oxygen for the hydrogen. In the reproduction of living beings, or tissue, the efficient cause is the living germ of the same kind, present beforehand. The proof is, that if this is absent, all the chemical affinities and electrical currents in the world are vain. The elements in a living tissue are held together, not by chemical affinities, but by a cause heterogeneous thereto, yea, adverse; the departure of which is the signal for those affinities to begin their action, which action is to break up the tissue. As to the effects in the two cases; in the production of water, the electric spark is the occasion for the coming of a potential affinity into action, whence a compound substance. In the case of the living body there is an effect additional to composition. This is life. Here, I repeat, is an effect wholly in excess of the other case, which affinity cannot imitate. Protoplasm dead, and subject to the decomposing affinities of other bodies, is the true analogue of water.

Physical force and vital causation are obviously heterogeneous. The former, in all its phases, is unintelli-

gent, involuntary, measured by weight, velocity, and quantity of matter affected, producing motion or equilibrium, mechanical or molecular. Even animal life has a species of spontaneity. Rational spirit, as a cause, has the unique attribute of free-agency, the very opposite of *inertia*, self-active and self-directing. Mind and its modifications cannot be measured in any physical quantities or terms, and hence it cannot be correlated to force. Volition is not transmuted into force, but controls and resists it. The nature of vitality is to resist the material forces, such as chemical affinity. When life departs, these resume their sway over the matter of the body, lately living, as over any similar matter; but as long as the vital cause is present, it is directly antagonistic to them all.

There is a still more fatal defect in this hypothesis, the destructive force of which Huxley has himself pointed out, and ingeniously illustrated in another connection. This is the total absence of actual verification. No man has ever communicated life to dead. compounded matter. Let the infidel chemist make a living animal in his laboratory, without a living germ; then only will his hypothesis begin to rise out of the region of dreams. There are, in fact, four spheres of creature existence, the inorganic or mineral, the vegetable, the animal, and the human or spiritual. Notwithstanding analogies between them (which is just what reason should expect between works of the same all-wise Architect), each is separated from the rest by inexorable bounds. No man has ever changed any inorganic matter into a living vegetable, without the help of a preëxisting vegetable germ; nor vegetable matter into animal, without an animal germ; nor animal into human, save by the aid of a human germ. The scientific (as well as the theological) conclusion is, that there is, in each of these, a distinct cause. The inference bears every test of a sound induction. Huxley claims that

when his propositions about the identity of protoplasm are once accepted, our feet are upon the first rung of a ladder which necessarily leads us to the conclusion that thought and volition "are expressions of molecular changes in that matter of life which is the source of other vital phenomena" in fungi and the lowest animals. This is a specimen of the absurd license of this pretended science (which might more accurately be styled unsavory jesting), which aspires to overthrow the universal convictions of rational men and the testimony of Scripture at once. If the premises were granted, the conclusion would still be utter'v denied. If it were proved that vegetable phenomena were due merely to molecular affinities of inorganic matter, animal life would still be separated from it by a great gulf. Again, if animal life were nothing but chemical action, there would still be a great gulf between mental action and the other two, as impassable as ever. Thought and rational choice cannot possibly be ascribed to a substance extended, inert, passive, and involuntary.

Here we are reminded that in organized creatures, there is something more than the physical, or even the vital causes which form it; design. There is the most ingenious, successful, diversified adaptation to functions. Such design is a Thought; yea, more, such intentional adaptation discloses volition. Suppose now, that chemical affinities can form protoplasm; have they design, thought, wisdom? Says Prof. Jos. Henry: If I melt together brass and glass, the result is a slag; and that is the effect which physical causes produce. If I fashion them into a telescope, that is the kind of result which Design produces. Dr. Stirling, of Edinburgh, admirably illustrates this license of Huxley's pretended reasoning, alluding to Paley's famous illustration of the argument for design from the newly-found watch: "Protoplasm breaks up into Carbon, Hydrogen, Oxy-

gen, Nitrogen? True. The watch breaks up similarly into brass, steel, gold, and glass. The loose materials of the watch [even its chemical materials, if you will,] replace its weight quite as accurately as the four constituents, Carbon, etc., replace the weight of the 'protoplasm.' But neither these, nor those, replace the vanished idea, which was the important element. Mr. Huxley saw no break in the series of steps in molecular complication; but though not molecular, it is difficult to understand what more striking, what more absolute break could be desired, than the break into an idea. It is of that break alone that we think in the watch; and it is of that break alone we should think in the protoplasm, which, far more cunningly, far more rationally, constructs a heart, an eye, or an ear. That is the break of breaks; and explain it as we may, we shall never explain it by molecules." Here, then, is the fatal chasm in the materialistic scheme. Not only does it overlook the essential difference between inorganic and vital causes; it is guilty of the absurdity of ascribing to the blind, unintelligent force of protoplasm, more thought, choice, and wisdom, than all the philosophers in the whole world will ever attain unto. When we rise to the crown of the series of living creatures in man, the absurdity culminates in the highest conceivable extravagance; for there we see a being not only displaying the highest thought about him, but also containing thought in him.

3. Let us look, now, at the part of this structure contributed by Mr. Darwin. We object, first, that the favorite law of "natural selection" involves in its very name, a sophistical idea. Selection is an attribute of free-agency, and implies intelligent choice. But the "Nature" of the evolutionist is unintelligent. She acts by hap-hazard. To apply the idea of selection to such fortuity is but a metaphor, not science. Dr. Darwin, perhaps, seeing this fatal objection, thankfully accepts

from H. Spencer what he deems the more accurate phrase, "survival of the fittest." But we still have the same absurdity insinuated under a metaphor. Fitness also implies design! Fitness is an adjustment. the physical interaction between environment and organism should regularly result in this adjustment, while totally blind, is a supposition wild enough. But a multitude of cases might be found where the notion becomes impossible, because the fitness existing is not between the being and its ordinary environment, but between it and some other being which it rarely meets, or never meets once in its existence. The natural venom, for instance, of the rattlesnake, is a contrivance fitted only to destroy its assailants. That poison has no adaptation whatever to its ordinary food, or companions, or nest, or the grass and leaves over which it glides; its only "fitness" is to destroy an assailant which the snake may not meet twice in its life. Did that possible future assailant develop the poison by a re-action? It is further noted by Agassiz, that the principle of life, or cause in animated nature, notoriously and frequently produces the same results under diverse environments, and diverse results again under the same environments. These facts prove that it is not the variable kind of cause painted by the evolutionist, and does not effect these uniform results by a fortuitous natural selection.

Evolutionists not only admit, but claim, that a vast tract of time must have elapsed, while "natural selection," acting blindly, failing, perhaps, myriads of times where it succeeded once, and then only establishing the slightest differentiations, was evolving the wondrous animated universe out of the rudest germs. The remains of the failures of this blind striving towards development ought, then, to be a myriad times as numerous as the remains of the successes. For, while the corpses of mere jelly-fish and such like were perishable as soon as dead, and may have mixed with the undis-

tinguished loam of the earth, the vast genera of crustaceous and vertebrate fishes and animals, all left behind them remains capable of preservation as fossils. Palæontologists (to whom the evolutionists, of all men, are bound to adhere,) hold that great masses of these fossils actually remain, many of them of almost incredible age. But they all represent established genera. Where are the fossils of the transitional and intermediate links. which ought to be a myriad times more numerous? Were evolutionism true, "the world would not be large enough to contain them." Again: fossil natural history should present us with both sides of the history of the blind process of this natural selection, with the fossils of the degraded, the unfit, as well as with those of the developed species. How is it that Mr. Darwin only dwells upon the latter? especially as the down-hill side of the history ought to be ten thousand times the fullest. But did the fossils present us with such a history, then how preposterous would it be to call the course of nature an "evolution," when nature's decadences would almost infinitely outnumber her advancements? The evolution theory is also inconsistent with the wide diffusion of some of the highest species of animals. Man is the highest and most complicated result of this supposed process. Now it is natural to suppose that the local conditions, or environment, necessary for evolving this most complicated result, would be most rarely found. But man is found more widely diffused over the globe, and multiplying his species under more diverse climates and conditions, than any other animal. This is inconsistent with the result to be expected upon that scheme.

But is the "survival of the fittest" a fact in nature? Where it does exist, is it not rather an artificial fact, due solely to human providence, or that of some other rational being? Striking variations in species are, indeed, produced by the arts of cattle and dog-breeders

and bird-fanciers. But what becomes of them when left to "nature?" Surrender any individual of a "developed" variety, to the rude hand of nature, and its uniform tendency is to degradation. On a prairie, in a state of nature, the developed horse, or ox, or swine, would be the first to perish of his kind. These developed varieties, as a whole, as soon as the rational providence is withdrawn which produced them, always tend backward towards the common species from which they originated. Natural historians tell us, that when incidental causes have produced variation of some individuals from their kindred, the difference is largest in the earliest generations, and becomes smaller afterwards, unless artificial means are used to propagate it. Such variations must, then, have fixed and narrow limits. All breeders know the tendency of improved races to "fly to pieces," as it is sometimes expressed in their language. That is, when an improved type has been gained by crossing, all its progeny do not naturally reproduce the combined good points of the two parents; but there is soon manifested a violent tendency in many of them to follow, to an exaggerated degree, the peculiarity of one of the progenitors. One individual reproduces so exclusively the form of the sire, another so exclusively that of the dam, that they seem less akin to each other than do members of the original, unimproved stock. And the most artful vigilance is required in preventing these heterogeneous individuals from propagating, to preserve the combined type which is desired. Thus it appears that the natural, as distinguished from the artificial or designed law of variation, tends to produce a more confused and a degraded progeny, instead of an advanced one. Let us remember, again, that the natural consequence of the violences of the stronger individuals is, on the whole, to increase the hardships of the conditions under which all the species must gain subsistence. What

clearer instance of this law needs to be sought, than in the human species, where the savage anarchy produced by the violences of the stronger is always found to reduce the whole tribe to destitution, and thus to physical decadence? Why else is it, that Bushmen are poorer, shorter, uglier, and feebler than Englishmen? Couple this, which is a true law of nature, with another: that usually the pampered individuals in every species are the least fertile, and we shall see that the natural tendency of animal life is rather to the survival of the inferior. The Andalusian stud was left to "nature," and the law of natural selection, in Mexico and South America. The consequence is, that the "mustang" pony and Pampa horse are far inferior to their progenitor. Well does Dr. Stirling remark here: "Natural conjecture is always equivocal, insecure, and manysided. It may be said that ancient warfare, for instance, giving victory always to the ablest and bravest, must have resulted in the improvement of the race. Or: that the weakest being left at home, the improvement was balanced by deterioration. Or: that the ablest were necessarily most exposed to danger. And soaccording to ingenuity—usque ad infinitum. worthy conclusions are not possible on this method."

Naturalists teach us that in the animal world, true hybrids are always infertile. The familiar instance is that of the mule. The ass and the mare can propagate offspring, but that offspring can propagate nothing. It there is any small exception, that exceptional offspring is absolutely infertile, and is usually exceedingly ill-developed, or reverts towards one of the original species, so that the rule remains absolute. Hybrids cannot perpetuate their kind. Huxley in his "Lay Sermons," p. 295, very absurdly imagines that it suits his purposes, in one aspect, to appeal to this law; for it annihilates his hypothesis. Surmising that certain species have been produced by variation and natural selection, he appeals

to the law just announced, to prove that these are now true, distinct species. He thus gives his full sanction to the law. But if hybrids cannot perpetuate their kind, then no permanent species has ever arisen by "natural selection" in the way surmised by evolutionists. For, had individuals originated thus, they would have been hybrids, and, so, must have disappeared. It is the fixed judgment of sound natural historians, that in this law we have a barrier (doubtless designed by the Creator) which must ever keep the genera and species of living creatures distinct and permanent in the main. Providence thus prevents that disastrous intermingling of types of organization, shading off in every direction into interminable confusions which must have resulted in the fatal degradation of all the genera.

Dr. Darwin's supposition is obnoxious to the same fatal objection brought against Mr. Huxley's, the total absence of a verification. No man has actually created a species by evolution, which was permanent, and which met the other requisitions of natural science, for evincing the true, distinct species. Men have produced varieties of pigeons, dogs, swine, oxen, and horses: that is all. Mr. Darwin does not pretend to claim more in the arena of facts. What they have done in these cases he thinks, looks as though Nature may have done more. If his thought be a just one, then all that it will entitle him to infer is the possibility that species may have begun thus. But according to the rules of logic, as admitted by all, that "may be" can never rise to the position of a scientific truth, until it is verified by actual observation. We are given to understand that they have no such instances. Where is that "anthropoid ape" which produced a man? Where is there a man really produced by the ape? Nobody pretends to have seen either. In fact, verification is not only lacking, but impossible; because, the supposition puts this whole work of natural selection, as to any distinctive results, so far back in the past, that human history has not, and can never have, any record of a single one of its decisive facts. This simple view should leave the whole scheme then, were men imbued with the true spirit of science, among the mere fancies with which poets amuse their idleness. It is related to science, just as Gulliver's voyage to Lilliput is to geography.

But there are extant verifications against the scheme. The Darwinian professes a huge respect for palæontology. He must in consistency profess this; for if that branch of natural history is not true, all the pretexts of the evolution theory are gone. Of all palæontologists, the Darwinian has to be the most ancient. But if palæontology is true, then Darwinianism is proved false. According to that doctrine, as is well known, the relative ages of strata can be known; and it can be known that the oldest strata contain the remains of the oldest living creatures. Hence, were the evolution scheme true, the oldest strata must necessarily enclose the remains of the most rudimental creatures, the next later strata must show us more fully developed creatures, and the last strata and the surfaces and waters of the present earth must give us the most fully developed of all. But it is not so: as testifies the best and most varied palæontology. Mr. Hugh Miller crushed the "vestiges" with this fact; showing that some of the fossils discovered by him in strata so old as to have been supposed too old for any organized life, were of quite well developed vertebrata. Prof. Agassiz says that the strata show vertebrate fishes alongside of the earliest mellusca, and just as old. Couple with this the other facts, that the very simplest forms of animal life exist now, along with the most highly developed, in apparently as great profusion as in the earliest stages of life. Mr. Hugh Miller also showed, that when once a given genus appears (by its remains) in the stony records, the successive generations of it do not show any tendency

towards an improvement into higher and better organisms; but on the contrary, the later generations of that genus appear rather to have degenerated. And, at last, the fossil record seems to say that, having become too degenerate to endure its environment, the whole genus perished, leaving nothing that had life behind it. It would thus appear that, in the old, pre-Adamite ages, as in the centuries between the coming of the beautiful Andalusian horse to Mexico, and the evolution of the "scrubby" Mustang from it, "survival of the fittest" is no result of natural selection at all: but where it occurs, it is the work of a rational providence. and not of physical forces. Again: Agassiz, with other most eminent palæontologists, declares that the lesson they read from the "stony record," is, that when the old genera began it was not by any natural means; and when they perished, they left no progeny. They made a clean beginning and a clean ending; neither was transitional. The fossil remains of man are the most conclusive of all. The most ancient skulls and skeletons display just as perfect frames, and as much brain, as the modern man. During all the ages man has existed as a species, there is no discoverable evolution.

Next, if the evolution process has taken place, it was a physical one; for its assertors hold that it is the work of physical forces. They also teach that man is, thus far, its highest and best fruit. Then, man ought to be physically the strongest and greatest animal. But he is not. Compared with many of the mammalia as a beast, he is an inferior beast. The young human infant has far less instinct and locomotion than a young partridge, or a calf. The man has blunter senses, less strength, and less sagacious instincts, than the eagle, the elephant, and the gorilla. He has less longevity than the goose. That which makes him the nobler creature is not animal instinct, nor muscular strength, nor complicated organs, but reason. He is "lord of

creation" by his *Mind*; but for that many other beasts would rule over him, yea, destroy him.

4. We now reach a point of the evolution scheme where we collide with all its different teachers. That point is: Whence man's mind? They have to answer. that it is only a function, evolved from mere matter, through the animals. Just as Dr. Darwin accounts for the evolution of the human hand from the fore-paw of an ape, so all the wonders of consciousness, intellect, taste, conscience, volition, and religious faith, are to be explained as the animal outgrowth of gregarious instincts, and habitudes cultivated through them. any man who has either a single scientific idea touching the facts of consciousness, or a single throb of true moral feeling, this is simply monstrous. It, of course, denies the existence of any substance that thinks, distinct from animated matter. It utterly misconceives the unity which intuitively must be found underlying all the processes of reason in our minds. It overlooks utterly the distinction between instinctive and rational motives. thus making true free-agency, virtue, moral responsibility, merit, and moral affection, impossible. It supposes that as the sense-perceptions and instincts of the beast have been expanded by association and habit into the intellect of a Newton, so the fear and habit of the beast, cowering under his master's stroke, or licking the hand that feeds and fondles him, are the sole source of the noble dictates of conscience and virtue. The holy courage of the martyr, who braves the fire rather than violate the abstract claims of a divine truth, is but the outgrowth of the brutal tenacity of the mastiff, when he endures blows and torments rather than unlock his fangs from the bloody flesh of his prey. The heroic fidelity of the patriot, in the face of the grimest death, is but the quality of the dog which will fetch and carry at his master's bidding. The disinterested love of Christian mothers, the heavenly charity which delights

to bless an enemy, the lofty aspirations of faith for the invisible and eternal purity of the skies, the redeeming love of Jesus, all that has ever thrilled a right soul with deathless rapture of admiration, and elevated man towards his Divine Father, are destined to have neither a future nor a reward, any more than the fragrance of a rose, or the radiance of the plumage of the bird, or the serpent's scales. After a few years, all that shall forever be of the creature endowed with these glorious attributes, will be a handful of the same dust which is left by the rotting weed. The spirit which looked out through Newton's eye, and read, through the riddles of the phenomenal world, the secrets of eternal truth and the glories of an infinite God, went out as utterly in everlasting night as the light in the eye of the owl or bat, that could only blink at the sunlight. These are the inevitable conclusions of Evolutionism, and they are an outrage to the manhood of our race. What foul, juggling fiend has possessed any cultivated man of this Christian age, that he should grovel through so many gross sophistries, in order to dig his way down to this loathsome degradation? The ancient heathens worshipped brute beasts, but still they did not forget that they were themselves the offspring of God. It remained for this modern paganism to find the lowest deep, by choosing the beast for his parent, and casting his God utterly away.

Happily, the doctrine is as false, as impossible to be true, as it is odious. If we take the course most in favor with the evolutionist, external observation, we find an utter lack of verification, and, on the other hand, every known fact refutes the supposition. When we ascend to the earliest ages, we find from history that, although human knowledge has grown by accretion, the soul of man is the same precisely, in faculties and essence, which it was at the beginning of history. Nor is there any evidence that any of these faculties

have become relatively stronger. Let it be remembered that, in the matter of the accretions of knowledge, we stand upon our forefathers' shoulders: we begin where they left off. So that if we had not far excelled them as to the aggregate or total of arts and knowledge, that would have been an infallible evidence our faculties are in themselves inferior to theirs. When we inquise what was the strength of the faculties of the early men, we find that the first known statesman was the noblest and grandest - Moses. Homer, the earliest of poets, has been the admiration and model of all subsequent poets. The earliest architecture, the pyramid of Cheops, continues to be the wonder of the world; and it was only by the latest and most refined applications of modern art that we learned (through Mr. Piazzi Smith) that its builders had, in that primeval day, mastered enough of astronomy to give their building a more accurate "orientation" than many modern astronomers had secured for their observatories, besides presenting us a wonder of power and grandeur which no later monarch or people has attempted to rival. Now, if the faculties of man were produced by a law of evolution, running through all matter and all time, that process would be going on now, as well as in all the past of human history. Ought it not to proceed with geometrical progress? At least, man should have advanced by this time to faculties as essentially different from those of Homer and Moses as theirs are different from the ape's. Whereas, his faculties remain precisely the same, and he has only advanced in that accretion of facts and arts which was unavoidable to a rational creature, not positively decadent.

Another experimental fact is, that in all the duration of human history the animals have evolved nothing essentially different from their earliest faculties. They have just the same powers and instincts now which they seem to have had in the days of those great ancient

Natural-historians, Aristotle and Solomon. The lower species have not advanced towards the higher; the higher have not advanced towards man. He entraps the wild beasts at least as successfully as in the days of Nimrod, and governs the elephant, the horse, and the ox. iust as in the days of Porus and Pyrrhus. Practically, the chasm between brute-instincts and human reason is just the same as at the beginning. Those instincts can be educated, or can even educate themselves, within a certain narrow limit. Spiders have been seen to adopt new adjustments for their webs, when subjected to unforeseen difficulties: and human care causes some animals to do things which others of their species do not. This is true. And, doubtless, the antediluvian spider, or the one which was in Solomon's house, showed just the same ingenuity. Ancient history can give us the same sorts of wonders, in dancing dogs and learned pigs, with modern. But there the evolution always stops. No one has taken a young ape and educated it into a man. When that is done, there will be a beginning in the demonstration of this hypothesis, and not until then. Since the day when it was said, "Men do not gather grapes of thorns, nor figs of thistles," that common sense of mankind which is, in truth, the most solid inductive and empirical logic, has ever decided that an invariable difference of results positively proves a difference of causes. Since men, in all ages, do a multitude of things which no brutes ever do, we know that man has a spirit essentially different from the hrute's.

Mr. Darwin endeavors to find some foothold for his doctrine of heredity in this matter, by pointing to a few cases of inherited instincts, not supposed to be original, in animals, and a few cases of inherited talents in men. We do not know that the original wild dog "stood" its game. The pointer and setter have been taught to do so, until their progeny inherit the instinct, and do it

while untrained pups. Doubtless, the original dog was taught, like all other beasts of prey, by his instincts, to crouch for his prey, or to pursue it, as circumstances prompted. Both modes of pursuit were instinctive. and human art has only evoked one to the disuse of the other. We are told that progeny sometimes inherits the special talents of parents. The great musician, Mozart, was the son of a musician. Suppose I should reply, that more frequently the children do not inherit their parents' special faculties? Patrick Henry left no orator in his family; Cromwell, no warrior. The truth is, that these facts are within very narrow and individual limits. Their effect upon the state of their species, as wholes, is at last naught. The individual exceptions terminate with themselves, or within narrow limits after them, and the law of the species moves on as before.

Allow man a distinct spirit, and then a law of heredity becomes intelligible, because there is a substance capable of receiving the inheritance of culture. But the Evolutionist refuses to allow this. He insists that the talents and bents of the philosopher of the nineteenth century are the aggregated inheritance of powers and habits acquired, during millions of years, from myriads of progenitors, all the way between man and the mollusk, and all delivered over by inheritance to this latest offspring. Yet he holds that the generation by the parent is only the transmission of an organic germ of matter. The father's spermatozoon, a microscopic speck of vitalized matter, which can contain but a few molecules, has yet, according to him, received and preserved the distinct material marks of all these innumerable differentiations, and these varied and almost angelic powers! Yet the man who can believe this, cannot believe that there is immaterial spirit, because it is neither visible nor tangible!

If we test this scheme, which evolves mind from the instincts of the brute, by internal observation, it is

equally exploded. I wish to reassert, here, the position that what we observe in our own consciousness is as truly empirical as what we observe without with our senses. He who denies this, has, in spite of himself, denied the validity of sensible experience; because no impression on the senses becomes valid cognition, save as it enters consciousness, and is interpreted therein. Now, consciousness informs us of a thinking self, a unit, without parts or extension. The rise of such a monad into being by gradual evolution is impossible. A habit may arise gradually, but mind is not a habit. It is the distinct spiritual substance, endowed with faculties, which intellectual habits qualify. Mind is not a habit: it is the spiritual thing on which habits form. habits may come by development; the substance cannot.

The impossibility of this genesis is especially plain in this, that it must suppose psychological faculties gradually superinduced. There must have been, first, in some earlier generation of men, a "protoplastic" reason, conscience, free-agency, and responsibility, which were still three-quarters or half animal instinct, and the rest mental. But every man who ever scanned his own acts of soul, knows that in all their stages, and in all their degrees of weakness and strength, they are entirely above and different from animal acts. It has been asked by Evolutionists: Is not the growth of the infant's mind precisely such a gradual development from animality to reason? I reply, that the rational principle is not developed out of the animal, but out of its own nature, which had been present alongside of the animal all the time. That the animal has not passed into the rational, is plain from this: all the motions of the animal nature are still present, and it is one chief business of the rational nature to resist and govern them. They are not identified, but are either enemies or master and servant. But, chiefly, in whatever degree the rational

and moral functions appear, whether in a rudimental or a perfect form, they present the same characteristic difference from the animal traits. A feeble conscience is no more like appetite, in its intrinsic quality, than the conscience of a Washington or a Lee. Dr. Darwin, we presume, does not believe in the transmutation of metals by alchemy. Were a chemist to show him some silver produced from an ore of lead, he would never believe that lead was literally changed into silver; he would pronounce at once that the Galena was by nature argentiferous, and he would demonstrate it by showing that all the percentage of lead was still present as lead, after the silver appeared. No more do we believe in this moral alchemy. The young ape is never developed into a virtuous being any more than the normal human child grows into a mere animal.

In a word, consciousness has its facts as truly as physics. These facts separate man as a distinct genus spiritually even more than his bodily shape does physically. It is an unreasonable and wilful perversion of science, to inspect the human specimen, and refuse to note his chief characteristics because they are mental. But had not the Evolutionist persuaded himself that there was no generic separation, he would never have attempted to evolve man's faculties thus.

5. Rational objections have been now presented, which entirely break the force of any plausible appearances, and place the evolution theory out of the pale of science. The most that can be claimed for it is, that it is an ingenious fancy. The mind properly imbued with the humble and cautious methods of inductive science would be led to this conclusion by the contents of these writings themselves. Suppositions have to be added to suppositions, in order to arrive at their conclusions. Asserted probabilities are quietly exchanged into assumed certainties. Propositions introduced as conditional, are, after a little, made absolute without right.

Many a "may be" is transmuted into a "must be." But, were all these yawning chasms closed up, the utmost which could be made of the evolution hypothesis would be, that it contained a curious possibility. The student who supposes that the authentic secular science of the day concurs in it, will be much imposed on. A long list of the greatest names might be easily given, who totally dissent. Among these may be mentioned the lamented Agassiz and Professor Joseph Henry, of America; M. Flourens, of the French Institute; J. Von Leibig, Reute, and Wagner, of Germany; Principal Dawson, of Canada; while we pass over a long list of the greatest names in Natural History equally influential.

These speculations are to be deplored, in that they present to minds already degraded a pretext for materialism, sensuality, and godlessness. The doctrine can never prevail permanently among mankind. The self-respect, the conscience, and the consciousness of men will usually present a sufficient protest and refutation. The world will not permanently tolerate the libel and absurdity that this wondrous creature, man, "so noble in reason, so infinite in faculties, in form and moving so express and admirable, in action so like an angel, in apprehension so like a God," is but the descendant, at long removes, of a mollusk or a tadpole.

But if the evolution hypothesis were supported by all the concurrent observations which we had opportunity to make, to the theist it may yet become wholly worthless. Let it be only supposed, as a possibility, that the existence of an all-wise, almighty, personal God can be proved by lines of evidence independent of this debate, and that this God reveals to us His testimony that the universe and the living creatures in it are His handiwork. We shall not forget, like the Evolutionist, that supposition is not proof; we shall not assume the truth of this supposition any farther than it is proved. But

we wish to point out this important truth, too often overlooked, that in such a case a hypothesis as to the origin of nature, however supported by à posteriori observations, would stand related to the theistic position precisely as "circumstantial evidence" does to the testimony of living witnesses in the courts. Judicial science, charged with the solemn responsibilities of the life and death of the citizens, has exactly ascertained the relations and rights of these two kinds of evidence. Upright and learned judges at law know that they cannot, when dealing with life and death, indulge their fancies in the logical license, which too often constitutes the serious amusement of so-called philosophers. So, they have decided that circumstantial evidence, in order to destroy the testimony of a competent witness, must be an exclusive demonstration. It must not only satisfy the reason that the criminal act may have been committed by the accused in the supposed way, but that it could not have been committed by any other. An enlightened judge, in the absence of eye-witnesses of the crime, would instruct his jury that the defence is entitled to test the accuser's hypothesis of guilt by this rule, namely: If any other hypothesis can be invented, even, that is purely imaginary and unsupported by a single positive fact, to which all the circumstances given by the prosecutor can be reconciled, that is proof of the incompleteness of the accusing hypothesis; the This law of evidence accused cannot be condemned. is just. For the hypothesis of innocence, compatible with the nature of things, and reconciling all the known facts, although absolutely unsupported by positive evidence, demonstrates at least this, that another hypothesis than that of guilt is possible. Now, let us suppose a crime committed without known eye-witnesses. The prosecutors examine all the attendant circumstances minutely and study them profoundly. Out of them they construct a supposition that the crime was

committed in secret by A. They show that this satisfies every fact so far as known. They reason with such ingenuity, that every mind tends to the conviction A must be guilty. But now there comes forward an honest man, who declares that he was eye-witness of the crime, which he saw done by B, and not by A; and on inquiry, it appears that B was at that time naturally capable of the act. Then, unless the prosecutors can attack the credibility of this witness, before his word their case utterly breaks down. The ingenuity, the plausibility of their ar ument now goes for nothing. They had shown that, so far as was hitherto known, the act might have been done by A. But the witness testifies that, in fact, it was done by another competent agent, B. The judge will then instruct that, unless the prosecutors have legitimate means to contest the credibility of the witness, the argument is ended, and the accused entitled to his verdict of acquittal. The plausibility of the accusing hypothesis and the ingenuity of the prosecutors are precisely what they were before. So, the facts remain as they were. But that hypothetical construction of them is utterly superseded by the testimony of the eve-witness.

I take these pains to illustrate this familiar principle of evidence, because it is usually so neglected by unbelieving naturalists, and even by theologians. I assert a perfect analogy between the case of the circumstantial accusations, and the pretended evolution argument, as arrayed against the testimony of Revelations or Natural Theology. To all but the thorough atheist, this analogy is conclusive. If there is any valid evidence from any other source than the *phenomena* in question, for the existence of a personal God, all-wise, free, and omnipotent, whether from Natural Theology, History, Tradition, Miracles, Prophecy, spiritual experience, criticism; and if that God has testified that He was the eye-witness (because Agent) of a different

genesis of things, then the circumstantial argument of the evolutionist is superseded. However ingenious. however probable and seemingly sufficient in the light of the known physical facts and laws, this hypothesis vields before the word of this competent witness. Does that theory claim that, naturally speaking, organisms might have been produced by evolution? God the Agent, according to the case supposed, tells us that in point of fact, they were otherwise produced. As omnipotence is an agency competent to any effects whatsoever, if the witness is credible, the debate is ended. Büchner claims that the evolution theory must be true, because it is "the only hypothesis" which naturally accounts for the organisms which we see. not God another hypothesis? This simple question exposes the insolence with which the very question to be settled is assumed! In plain words: if evolutionism were a hypothesis naturally probable (which it is not, nor even possible), it would amount only to this: Here is a scheme, which, if we were certain there is no God. might possibly give the origin of organized things. From this slender, conditional ground, it incontinently. leaps to the conclusion that God is not, and that evolution did everything.

But let us see how firm is our position, when we set a Creator of "eternal power and godhead" against such a circumstantial hypothesis. I assert that our consistency appears from this consideration: that granting, even for argument's sake, a personal Creator, then obviously, whatever rational motives prompted Him to create, would prompt Him to produce organisms just as natural in traits, as though they had been the result of natural evolution. Let it be assumed, I repeat, only for argument's sake, that there is a God, and that His all-wise mind saw any motive, we may not know what, for creating horses, for instance. Then it is but a truism to say, that the same motive would, of course, prompt

Him to make them natural horses. The same conclusion holds of any other created thing. One motive for creating the first horses would be clearly revealed by the event: namely, that they might be natural parents of generations of horses descending from them. the first horses of supernatural origin must have had. in order for this result, every trait of naturalness; for otherwise they could not have naturally reproduced their kind. Does not the science of Natural History itself define unity of species by precisely those properties which are transmitted in the species by natural generation? Then, the naturalness of that first horse could not infer for it a natural origin, until you had by independent evidences demonstrated the absence of a Creator. The surmise that this horse came by evolution is worthless to demonstrate the absence of creative power, for the simple reason this must be first proved absent, before that surmise is good for anything.

My reasoning can be extended more widely than to animals. It may be unsafe to assume that the sovereign, creative mind must have been prompted by this or that final cause; but it is perfectly safe to say that it was prompted by some final cause, and that a consistent one. For this is but saying that the Creator is wise, and what He has effected is, so far, a disclosure of what He intended to effect. Now we knew that when God was engaged in creating structures both organic and inorganic, He intended them to exist under the reign of natural law, because we see him uniformly place them under that law. This is but saying that what He does is what He intends to do. But natural law could not govern that which continued contranatural in properties, (as well as supernatural in origin); therefore God must have created all His first structures, whatever they were, natural in properties, while supernatural in origin. Hence it is preposterous for any one, save a blank atheist to appeal to naturalness of traits

alone, as a sufficient evidence against a supernatural origin. "The beginning of a universe regulated by mechanical laws," says an eminent physicist, "must have been some 'configuration,' to which it might have been brought by the operation of the same mechanical laws, from an antecedent configuration mathematically assignable. Thus: The undisturbed orbit of a planet is an ellipse, described with a velocity periodically varying by a definite law. The planet passes any given point of its orbit with the same velocity, and in the same direction, in each recurring round. If it were arrested there, and then projected with that velocity in that direction, it would resume identically the same orbit. The actual motion at each point of the orbit is. therefore, the necessary projectile motion of the newcreated planet at that point. Hence, wherever created and projected, its initial motion might have been the result of centrifugal action. Thus the elliptical circulation presents no marks of a beginning or of an end. As regards the terms of its existence, the phenomenon is dumb. The lesson it teaches is not the shallow sophism that it has no beginning or end; but that whatever information we derive on these points, we must seek from a source other than nature."

The inference of an origin by mere evolution, from naturalness of the structure investigated, may, indeed, receive a complete reductio ad absurdum, or ad athcismum (which is the same thing), by applying it to the nebular hypothesis. This is, in fact, the surmise at which evolutionists usually choose to make their stopping-place. But if they are consistent, they should not stop there. If naturalness of condition implies necessarily a natural source; then this universe of incandescent, rotating star-dust implies a state of nature still previous. For does not vapor suggest evaporation; and does not sensible heat suggest an evolution from latency? Certainly. Then the evolutionist should not make his

first nebulous matter, his first, "Beneath the lowest deep a lower deep still threatening to devour him opens wide." There is, therefore, on this evolution logic. absolutely no stopping place, but a regressus into an infinite series of evaporations and condensations, filling all past eternity, each act of the drama containing the vast existence of one universe measured by millions of millions of years. The perfect justice of this reduction appears from this: that it is precisely the result of Herbert Spencer at the summation of his philosophy. But the ghastly wickedness of the conclusion is equal to its utter absurdity; the former appearing in the fact that it pushes God clean out of the universe, and out of eternity itself; the latter, in the thought that we have here precisely such an infinite series of finite effects (on an exaggerated scale) as Herbert Spencer himself, in common with all better philosophers, declares to be impossible. The time was, when vulgar, shallow atheism, asked flippantly, "Why not suppose that acorns produced oaks, and oaks acorns from all eternity?" Philosophy answered, that such a series of effects, each dependent and finite, yet independent as a series, would be a contradiction, a mere juggling cheat of the reason. Spencer cannot gainsay the answer. Yet the residuum of his whole pretentious method is, to give us precisely this cheat, in the form of an infinite series (not of acorns producing oaks, and oaks acorns, but) of universes "ending in smoke," and smokes evolving universes!

But the evolutionist may retort, that the independent evidence of the theist for a personal God has been, thus far, only supposed, not presented, and the doctrine of evolution disables us from ever presenting it validly. Evolution, say they, has exploded the teleological argument for the existence of a God. Dr. Huxley declares that the "Origin of Species" gives the death-blow to that argument. He quotes professor Kölliker, of Germany, as saying that, although Darwin himself

retains the teleological conception, his own researches show it to be a mistaken one. Says the German savant: "Varieties arise irrespectively of the notion of purpose. or of utility, according to the general laws of Nature: and they may be either useful, or hurtful, or indifferent." So, the "advanced" evolutionists generally. They evidently interpret the bearings of the evolution theory aright. Nature, in reproducing her kinds, has a ceaseless tendency to variations. This law is physical and blind: it knows not when it hits a success or a failure. But in virtue of an infinity of hap-hazard trials, in which it is impossible to miss all the time, it sometimes evolves an improvement. Then the structures thus improved, by virtue of the "survival of the fittest," exist and multiply. Thus, only give them ages vast enough, and they think they can construct all the cunning master-pieces of this universe, so "full of the wisdom of God," without purpose, mind, or will, by blind chance. Says a French evolutionist: "Cicero has illustrated the teleological argument by saving that if one told him the admirable poems of Ennius were produced by the chance tumbling of a multitude of characters out of a basket, he should pronounce the story incredible. But give me an eternity in which to repeat my experiment of casting the basket of types out, and I shall at last doubtless produce the poem." H. Spencer asserts that it is more anthropomorphism in us, to interpret nature teleologically. When we adapt anything to an end, we, of course, design and contrive. But it is absurd to conclude that therefore Nature does the same. Thus, this reasoning from the contrivances manifest in nature, up to a Creator's contriving mind, which has commanded the assent of every sound mind from the days of Job, Moses, Socrates, and Aristotle, to our own, is contemptuously repudiated.

In support of the teleological argument, I would remark, first, that this philosophy of blind chance is in no

sense less absurd than the old pagan theory, which referred all the adjustments of creation to a "fortuitous concurrence of atoms." It is indeed, but the same doctrine, revamped and refurbished, which, under the scornful logic of Socrates, has been cast out to the contempt of science, pagan and Christian, for two thousand years. The Evolutionist, in advancing it, requires us to go back, discarding all the acquisitions of human civilization in this department, and immerse ourselves in the stupidity of barbarism.

I remark, second, it is impossible to persuade the common sense of mankind that blind chance, whose sole attribute is chaotic disorder, is the source of the admirable order of this complicated universe. Something does not come out of nothing. Teach any sane man the beautiful structure of the human eye, with its numerous and delicate arrangements for its special function: teach him that man's optical science required ages of cultivation before he could even comprehend, and other years of study before he could imitate those wondrous adjustments; and then tell him that a blind cause did it all. He will exclaim: "He that formed the eve, shall not He see?" An American evolutionist has confessed that when he thought of the attempt to apply his theory to the production of a human eye, it at first "made him shiver." Well might he shiver! The convulsion was the protest of his outraged nature against so monstrous a wrong to its reason. The fancy that it can hold true is a sickly delusion.

They ask us: "Since blind chance may, amidst the infinite multitude of its experiments, happen upon any results whatsoever, why may it not at times happen upon some results wearing these appearances of orderly adaptation?" I answer: the question puts the case falsely. Sometimes? No. Always. The fact to be accounted for is, that Nature's results have always an orderly adaptation. The question we retort, then, takes

this crushing form: How is it that in every one of Nature's results, in every organ of every organized creature, which is known in living or fossil Natural History, if the structure is comprehended by us, we see the orderly adaptation? Where are Nature's failures? Where the vast remains of that infinite mass of her haphazard, aimless, orderless efforts? On the evolution theory, they should be myriads of times as numerous as those structures which received some successful adaptation. Let us recur to the illustration of the Frenchman. employing an eternity in throwing a basket of printer's type abroad blindly, until, after perhaps an infinite number of throws, he happened to get precisely that collocation which composed the martial poems of Ennius. Why might it not happen at last? Suppose, I reply, that the condition of his experiments were this: that he should throw a different basket of types in each trial. and that a considerable part of all the types thrown in vain should remain heaped around him; then, he and his experiments would have been buried a thousand times over beneath the rubbish of his failures long before the lucky throw were reached. But this is the correct statement of the illustration. The simple making of this statement explodes the whole plausibility, leaving nothing but a bald absurdity. For, as has been already stated, Evolution must admit the teachings of Palæontology. But the latter asserts that the organized beings of vast ages still exist, in the form of fossils. Now, will the Evolutionist pretend that the durable remains of the hurtful variations were less likely to continue in the strata than those of the naturally selected? Not one whit. Then, there should be, on his supposition, as large a portion of the printer's types from every unsuccessful "throw" left for our inspection as from the sole successful one. Where are they? No living, no fossil creature is found without complete adjustments to the ends of its existence; or, if there are apparent

exceptions, it is only because we have not yet knowledge enough to comprehend them. Through every grade of ancient fossil life, if we are able at all to understand the creature whose remains we inspect, we find the same admirable adjustment to the conditions of its existence. This is as true of the rudimentary as of the most developed. The genus may be now totally extinct, because, in the changes upon the earth's surface, the conditions of its existence have passed away. But, while those conditions existed, the organs of that genus were perfectly adapted to them. So, if there is in any existing creature a structure, whose orderly adaptation to an end is not seen, it is only because we do not yet understand enough. Such is the maxim of true science: and it is the prime organ of its advancements. Anatomists, before Dr. Harvey, had seen the valvular membranes in the veins and arteries opening different ways. That great man, in the spirit of true science, assumed that they must have their final cause, inasmuch as a rational Creator placed them there; and it was by following this postulate that he was led to the circulation of the blood. So, in all true science, now, the certainty that every structure has its final cause, is the pole-star of induction. It is a safe prediction, that so soon as this new doctrine of darkness is established in physical science, there will be an end of all its splendor and progress.

But, to return: will the evolutionist seek to evade this ruinous consideration, by saying that natural selection has, long before our day, worked to such advanced results, that nothing is now evolved unfitted for survival? Such a resort is impossible for them; first, because it would be a sheer surrender of their favorite dogma of the uniformity of nature; second, because it would retract their fundamental law of perpetual variation, which, if it operates at all, must produce differentiations favorable, unfavorable, and indifferent; and,

last, because the remains of palæontologic life go back to the most rudimental forms of vegetable and animal life, so that, if evolution were true, the records still left to us ought to include the whole history, with all its blind blunders, as well as its successes. There is no escape for the Evolutionist from this demand. He must show us fossil-evidences of the evolution, containing specimens of all the countless degradations by variation, of all the unfitted for survival, of all the intermediate shades through which genus was differentiated from genus, of all the blind, non-adapted abortions, as well as of the few lucky advancements. He must show them in numbers at least proportional to the myriad fold numbers of their classes. But he cannot show us a single one!

I argue, again: that marks of designed adaptation are not confined to those organic creatures which propagate their kind. The permanent inorganic masses also disclose the teleological argument just as clearly. Contrivance is as obvious in the planetary circulations, and in the tides and winds, as in the eye of the man or the wing of the bird. "The undevout astronomer is mad." Newton saw the handiwork of God in the heavens as plainly as Paley in the animal kingdom. Maury has shown us as beautiful a system of adaptations and as delicate adjustments, in the currents of the sea and air, as in the organic life of their denizens. But have sun, moon, and stars propagated so often as to give blind chance scope and verge enough, at last, to evolve all their wonders of wisdom from her blundering experi-The evolutionist derives those bodies from nebulous matter. We were not aware that he supposed a multitude of generations of planets had intervened between these which we now see displaying their Maker's wisdom, and the first revolutions of the nebulous mass which generated them. The evolutionist needs to have fossil planets as plentiful as polypi, in order to work out his theory with them.

Again: were this theory all conceded, the argument from designed adaptation would only be removed a step backwards. If we are mistaken in supposing that God made the first of every living creature after its kind; if the higher ones were, in fact, all developed from the lowest, then the question recurs: Who planned and adjusted these wondrous powers of development? Who endowed the cell-organs of the first rudimentary living creatures with the different fitnesses for diversified evolutions? Who provided for all these varied and admirable results from means apparently so simple and similar? There is a teleological evidence at least equal to that revealed in the Mosaic genesis. The justice of this statement appears thus: Those Christians who concede the theory of a "creation by law" (as I conceive, very unwisely and inconsistently) do not think that they have thereby weakened the teleological argument in the least. Another evidence of the justice of my point appears in the language of evolutionists themselves; when they unfold what they suppose to be the results of their scheme, the marks of design and final cause are so indisputable, that the phrases "beautiful contrivance," "marvelous adjustment," and such like, are extorted from them unwittingly. This is the testimony of their own common sense, uttered in spite of a perverse and shallow theory.

But evolutionists claim that they can point us to instances of selective arrangement wrought by the unintelligent forces of nature, just as striking as anything upon which theists found the teleological argument. Huxley retorts to *M. Flourens*, that if he would go to the coasts of his own Brittany, he would find the senseless winds of the Bay of Biscay selecting the heavy and the lighter particles of sea-sand, and placing them in different belts along the shore. We are also reminded that it is possible for a hurricane to transplant a sapling to a new seat in the soil. I reply, that these instances delude

them, by reason of their overlooking two obvious truths. One is, that when such an adapted result is thus established, the hap-hazard natural agent is but the occasion, not the cause of the effect: the other is, that they are led to imagine the unintelligent agent has wrought an orderly result only by bringing in other parts of the workings of nature, and other agencies. which taken together, do involve that very feature of orderly and systematic contrivance which they are endeavoring not to see. Let us explain the latter remark first. In order to show that the blind sea winds select the grains of sand and separate them, Huxley has tacitly to borrow other combined agencies, which are a part of the Creator's wisely adjusted system; the gravitation of matter, the configuration of the hills and shores, the groves of trees. It is to the combined action of all these, that the seeming assorting and separation of the grains of sand are due, not to any power in the blind winds by themselves. Who planned that combination of actions? This is the very question which Huxley begs. He tacitly borrows the effects of a rational contrivance, to account for the result without contrivance. "If he had not ploughed with my heifer, he had not found out my riddle." The student will see this whole illusion exploded, if he will restrict Huxley within the effect proper of one blast of wind. Inspect any given sand hill: has this blind agent, in a single case, observed any order or method whatever in depositing any set of grains of sand, as to each other? Not in one single They are, as related to each other, deposited at random; the blind cause has resulted in a blind effect. We see thus, that when we eliminate the powers of a combined and adjusted system of natural causes, which contains the very point in debate, each blind cause is found to produce results without order, as common sense had always believed. If a man walking over a field sees grains of corn deposited in a geometrical order, with an obvious design to tillage (in rows), he knows that a rational agent did it. If he examines the same field strewn over with scattering hail-stones by a storm, he knows that he will find the fragments of ice distributed without any order, inter se; because an unintelligent agent acted in that particular. As said Prof. Jos. Henry, When natural force combined the brass, glass, steel, and gold, the only result was a mass of slag, or cinder; when mind combined them, the result was a telescope. Here is the naked difference between the blind, and the intelligent cause; when men think they have evaded it, they onl; deceive themselves.

The other illusion of the evolutionist was in confounding mere occasion with cause. The wind may happen to drop a sapling which the torrent had just torn up, and to drop it with the heavier end, which happens to be the root, downwards, into a chasm of earth which the same hurricane had just made by uprooting a forest tree. But I ask: Who arranged the atmospheric laws which move hurricanes? Who regulated the law of gravity which made the root-end of the sapling fall downwards? And especially, who endued the roots of that sapling, as its twigs were not endued, with the power of drawing sap from the moist earth? Did the blind hurricane do all that? But without all that, no growth, no real transplantation would have resulted; the sapling would have remained as true a wreck, as random a castaway, as any piece of rotting seaweed cast upon the beach. So that it turns out, the wind was but occasion, and not real cause of the result. In every such instance, the evolutionist tacitly avails himself of a selected adaptation, which was outside any and every specific blind cause, and was essential in order to a result. We conclude, then, that the great teleological argument for God's existence stands unshaken and impregnable. The common sense of civilized mankind has not been thus mistaken in believing

that where design is obvious, there must be a Designer.

I have thus led the student through a somewhat ex tended criticism of the evolution-theory; viewing it as it is an ally to the kindred cause of materialistic atheism. Having estopped the materialist from this path, by which he attempts to escape the existence of spirit and God, we return to the old conclusion, and we accept the existence of both. Thus, the common faith of all the virtuous, and all the truly wise, of all ages, nations, and creeds, is found unshaken by this recent storm of words. I purpose to conclude with a brief review of what is also a powerful argument, the moral affinities of the two philosophies.

We saw that the practical effect of Darwin's speculations was to make man one among the beasts. Huxley and his comrades would end by reducing both man and beast to the level of the clod. Why is it, that any mind possessed even of the culture displayed in these ill-starred speculations, does not resent the unspeakable degradation which they inflict upon mankind? Men would not thus outrage their own natures. without an interested motive. That motive is, doubtless, in many, the craving for license from moral restraints, and release from that accountability to a holy God, which remorse foreshadows. In the more decent it is probably a semi-conscious vanity of intellect, itching for a place apart from the common crowd of thinkers, and a semi-conscious craving for the liberty of an irresponsible self-will. They wish not to have this Christ to reign over them. To the sinful mind viewing its destiny superficially, it may seem a fine thing to have no omniscient Master; to be released from the restraints of law: to be held hereafter to no account for conscious guilt. But let us see whether even guilty man has any motive of self-interest to say in his heart, "There is no God," whether atheism is not at least as horrible as hell.

The best hope of materialism is annihilation. This is a destiny terrible to man, even as he is, conscious of guilt, and afraid of his own future. Does he plead, that if this fate robs us of all happiness, it is at least an effectual shield against all misery? I reply: The destruction of man's being is a true evil to him, just to the extent that he ever experienced or hoped any good from his own existence. How strong is the love of life? Just so real, and so great, is the evil of extinction. Second, but for guilt and fear, a future immortality would be hailed by any living man as an infinite boon. Of this, annihilation would rob us. How vile is that theory of existence which constrains a rational free agent to embrace the hope of an infinite loss, solely as a refuge from his own folly and sin? The vastness of this miserable robbery of self can be poorly cloaked by the wretched fact, that this soul has so played the fool and traitor to its own rights and destiny, that it is now self-compelled to elect the infinite loss of annihilation, rather than meet an alternative still more dire!

But materialism and atheism do not make one sure of annihilation. Despite his denial of a spiritual substance, the materialist has a conscious identity, which has somehow been continued through a number of molecular and organic changes in that which he supposes its seat; it may, therefore, continue in spite of It is the character of his philosophy to believe that "the thing which hath been is that which shall be." Some materialists have professed to believe in immortality. But should it be that man is immortal, and yet has no God, this itself will be eternal despair. For no materialistic theory can then expel from the man those immutable realities, sensibility, hope, fear, sin, guilt, accountability, remorse; for their presence in us is more immediately testified by our consciousness, than any physical fact can be, which men attempt to employ as a datum for this one-sided philosophy. At least,

when death comes, that "most wise, mighty, and eloquent" teacher dispels the vain clouds of materialism. and holds the soul face to face with these realities, compelling him to know them as solid as his own conscious existence. But now, if the materialist-theory is true, there is no remedy for these miseries. There is no God omnipotent to cleanse and deliver. There is no Redeemer, in whom dwell the divine wisdom, power, love, and truth, for man's rescue. The Bible, the only book that ever professed to tell fallen man of an adequate salvation, is discredited. Providence and Grace are banished out of the existence of helpless, suffering man. There is no object to whom we can address prayer in our extremity. In place of a personal God and Father in Christ,—the fountain and exemplar of all love and beneficence, to whon we can cry in prayer, on whom we may lean in our weakness and sorrow, who is able and willing to wash away guilt and heal depravity, who is suited to be our adequate portion through an eternal existence,—we are left to confront this infinite Nature, material, impersonal, reasonless, heartless. There is no supreme, rational, or righteous government over man; and when the noblest sentiments of the soul are crushed by wrongs so intolerable, that their perpetual triumph is felt to be more hateful than death; there is not, nor shall there ever be, to all eternity, any appeal to compensating justice! But our only master is an irresistible, blind machine, revolving forever by the law of a mechanical necessity; and the corn between its upper and nether mill-stones is this multitude of living, palpitating, human hearts, instinct with their priceless hopes, and fears, and affections, and pangs, writhing and bleeding forever under the remorseless grind. The picture is as black as hell itself. He who is "without God in this world," is "without hope." Atheism is despair.

This doctrine will never win a permanent victory

over the human mind: the utmost it can do is, to betray a multitude of unstable souls to their own perdition, by flattering them with an entire impunity in sin; and to visit Christendom with periodical spasms of anarchy and crime. With masses of men the latter result will always compel this doctrine to work its own cure. For upon its basis, there can be no moral distinctions, no right, no wrong, no rational obligatory motive, no rational end, save immediate, selfish, and animal good, and no rational restraints on human wickedness. consistent working of materialism would turn all men into beasts of prey, and earth into Tophet. Fortunately, the traditionary and involuntary influences of Christianity cause many of its opponents to be inconsistent: and we are always glad to concede to such of them as deserve it, the credit of being better than their creed. Tyndal insinuates that atheism is the ennobling doctrine, contrasted with Christianity. For were not Democritus, Epicurus, Lucretius, like Prof. Tyndal, extremely moral and virtuous men? Nay, do not their characters stand in favorable contrast with those of the Christian divines, especially in view of the dereliction of these naughty men from that species of toleration of opinion (the infidel philosopher's cardinal virtue) which regards an assault upon the infinite excellence of our Redeemer as an entirely proper object of complacent regard, and which has no heat of indignation for any error whatsoever, save the error of being zealous for truth and righteousness? Unless Tyndal regarded his audience as fatuous, the impertinence of this portraiture of his pet-atheists as the good people is almost fatuous. Does "one swallow make a Summer?" Shall the two trees be tried by their fruits? Then, we must not take an exceptional case from among the unbelievers to compare with an exceptional case among nominal Christians. The exceptional atheist may be, as we hope Prof. Tyndal is, a decent and benevolent person, not because of,

but in spite of, his professed principles. He is prob ably made decent by the indirect influences of that Christianity which he professes to contemn. Mr. Tyndal, if we mistake not, was the son of a worthy non-Conformist minister of the Christian Church. The Christian virtues of the father descend, to some extent, to the son. But let him rear his sons and grandsons consistently in atheistic opinions and among atheistic companions, and we shall see the fruit. The fair mode of comparing the fruits is to contrast the whole body of atheistic materialists with the whole body of sincere Christians. Then, on the one side we have such characters as the Iacobins and sans-culottes of Paris in her two reigns of terror, and those original "Positivists." the Bushmen of Africa, and the blacks of Australia; on the other, we have nearly all that has been good and true and pure in Christendom and without it.

Fortunately, even the partial establishment of this Godless doctrine produces mischiefs so intolerable. that human society refuses to endure them. Besides this, the soul is incapable of persistent atheism or materialism, because of the inevitable demands of those constitutive laws of thought and feeling which qualify it as a rational spirit. These cannot be abolished by any conclusions drawn from themselves, for the same reason that streams cannot abolish their own fountains. The sentiment of religion is omnipotent in the end. We may rest in assurance of its ultimate triumph, even without appealing to the work of the Holy Ghost, whom Christianity promises as the omnipotent coadjutor of the truth. While irreligious men explore the facts of Natural History for fancied proofs of a creation without a Creator, the heralds of the Gospel will continue to lay their hands upon the heartstrings of immortal beings, and find there, for all time, the powers to overwhelm unbelief. Does the divine deal only with things spiritual? But these spiritual consciousnesses are more stable than all the other's primitive granite. Centuries hence, if man shall continue in his present state so long, when these grovelling theories of unbelief shall have been assigned to that *limbus* where polytheism, alchemy, and judicial astrology lie contemned, Christianity will be still subduing the nations and blessing the world with its beneficent sway.

There is an argument, ad hominem, by which this discussion might, with strict justice, be closed. If materialism is true, then the pretended philosopher who teaches it is a beast, and we are all beasts. Brutes are not amenable to moral law; and if they were, it is no murder to kill a beast. But brutes act very consistently upon certain instincts of self-preservation. Even they learn something by experience. But this teaches us that the propagator of these atheistic ideas is preparing intolerable mischief; for, just so far as they have prevailed, they have let loose a flood of misery upon mankind. Now, then, these teachers are venomous. The consistent thing for the rest of us animals, who are not serpents or beasts of prey, is to kill them as soon as they show their heads; just as whenever the stags see a rattlesnake, they cut him in pieces with the lightning thrusts of their keen hoofs. Why is not this conclusion perfectly just? The only logic which restrains it is, that Christianity, which says that we shall not shed man's blood, "because in the image of God made He man;" but which these men flout. The only reason we do not justly treat atheists thus is, that we are not, like them. atheists.

CHAPTER X.

VALIDITY OF A-PRIORI NOTIONS.

THE necessity for this chapter in our discussion. again, illustrates the trite maxim: "Extremes meet." We have seen Mr. Herbert Spencer, after beginning on the most extreme sensualistic ground, and adopting the most extreme Nominalism as to our abstract ideas; borrowing the most vicious of the transcendental features of Sir William Hamilton's "rational realism" from him and Mr. Basil Mansel. The philosopher of Materialism attempts to prove by these, his adversaries, that all our knowledge is merely relative. and that God is unknowable (along with all other unconditioned conceptions). The real amount of Spencer's whole process, we saw, was but this: That, since God is "unthinkable," philosophy should discard Him, and refer everything to a single principle: force cternally persistent. And that, as all material phenomena, which he holds the only "thinkable" ideas, the more fully their causes are understood, are more nearly reduced to a single invariable law, the creation of a philosophy must consist in the unification of all sciences as laws of a single power, and all the effects of the universe, whether material, mental, or supernatural (so called), as effects of that single power: eternal force.

I showed the student, very briefly, but very clearly,—confirming my assertion by Mr. Spencer's own admissions,—that if we let him take his choice, then his matter and his force-God have become as absolutely "unthinkable" as spirit and God. I pressed the fatal

question: If the fact, that our ideas of spirit and God are unconditioned, must expel them from our philosophy, why should not the same fact expel Mr. Spencer's ideal matter and his force-God also? Why not? Why must we sacrifice the convictions of all wise men for three thousand years, with the intuitions of conscience and all the hopes of our immortality, in order to get rid of one pair of "unthinkables," that we may adopt another pair confessedly as "unthinkable?" Why? To the plain mind no reason appears; we are required to do it simply on the ground of caprice, that Mr. Spencer appears to have an obstinate prejudice both against God and his own soul. (The latter, possibly, better founded than the former.) He chooses to prefer another pair of "unthinkables" of his own invention. I also urged the question: Why is the reference of all effects to one power necessary to the unification of man's knowledge into a true philosophy? Because of the observed permanency and inter-consistency of natural law? No: for true philosophy answers, that this observed fact is abundantly satisfied by the omnipotent providence of the supernatural, divine Power, over the natural. Why, then, trample on all the demonstrations of separate spiritual powers, presented by the intuitive consciousness of our own free-agency and by natural theology, in order to "unify" what is already completely unified? I pressed this question: Why? Really, there is no answer, save that Mr. Spencer prefers to have it so. He does not like this unification, in the ruling will of One who is perfectly wise, good, holy, and true: that is the residuum of all his profundity. In a word, I showed that his whole system, if it could be anything, could only be a felo de se: if it makes the old natural theology impossible, it, for the stronger reason, makes his own impossible.

This is all that the modern unbelief accomplishes, when its premises are conceded. But the interests of

truth forbid our conceding those premises. We do not concede that human cognitions are only relatively valid. While we are very willing to concede that that impossible something-nothing, the unconditioned abstract, is unknowable, we do not concede that an Infinite Being is unknowable. The predictions made by sober minds of the unsafeness of these Hamiltonian speculations, and especially of their exaggerations in the hands of some of Hamilton's followers, have been fully verified: it is time they were corrected. I believe I shall be able to show, by a few very simple distinctions, that these extravagances also, where they are not the mere results of verbal ambiguities, are the fruits of a sensualistic heresy, retained in the bosom of a rational system.

We have been required to proceed thus: All cognitions are such, only as they are known in consciousness. The essential condition of all consciousness is the distinction of the "Me" and the "Not-Me." Hence, all cognition is a relation: hence the conclusion of the relativity of all knowledge. Now, there is a sense in which this is, of course, true. The relation of the "Not-Me" to the "Me," in consciousness, is the condition of all knowing. But the vicious sense put upon this almost truism is another thing, namely: that our knowledge is all only a relation; in such a sense that the modification of the nearer term, or pole thereof, namely, of the modes of consciousness of the "Me," would change the whole of the cognitions. would follow, that the mind can have no guarantee of the validity of any cognition-in-itself, inasmuch as it is impossible for our subjective consciousness to test the validity of its own modes by any judgment; the distinction of the "Me" and the "Not-Me" being, as all concede, the sole condition of all judgments. Now, the first remark I make upon this sophism is, that it is but a new statement of the old system of absolute scepticism. The man who has followed it out with a consistent thoroughness is the universal sceptic who, like Hume, doubts the validity of all cognition. For I see not how this process can be applied to lead me to the relativity of any knowledge, without proceeding the whole length. But this absolute scepticism has been shown again and again to be not only utterly degrading and ruinous to man, but a specimen of logical suicide.*

Again: This doctrine of the mere relativity of knowledge is but another way of stating the doctrine of the pure idealist. Bishop Berkeley was but making a partial application of it, when he reasoned that sensation really gives us no certainty of the existence of an external world. Kant was but making a partial application of it, when he concluded that the judgments of the pure reason, though unavoidable, are invalid. I. S. Mill is but doing the same when he concludes that the only knowledge we have of matter is of a "permanent possibility of sensations to us." And Hamilton is also travelling the same path of idealism, or, in other words, of (partial) scepticism, when he concludes that our knowledge of the secondary properties of bodies is only relative; while he holds that our knowledge of substance and of primary qualities is immediate. Mill has proved that Hamilton is inconsistent in not going farther; that he has leaped off the precipice, and yet endeavors to stop in mid-air. Hamilton thinks that by

^{*} In Veitch's Life of Hamilton, p. 153, are two letters from *M. Victor Cousin*, evoked by the famous article of the former on Cousin's Eclecticism in the *Edinburgh Review*. Cousin thus confirms my charge: "Je me permets d'appeler votre attention sur la théorie de la *Raison*, et vous prie de la bien méditer avant de la rejeter définitivement: car toute la question du scepticisme y est engagée, et je crois que si je vous tenais là, je vous prouverais que vous étes sur la route du scepticisme. Il ne faut pas avoir peur du mot d'absolu."

Again: "Prenez garde, je vous prie, de ne pas laisser dégénerer la philosophie écossaise dans un scepticisme nouveau, qui ne vaudrait guères mieux que l'ancien."

discarding the representationist theory of perception, and by asserting that the reality of bodies and their primary properties are immediately known in consciousness, he has saved these from the idealistic tendency. We have assurance of their validity, not in the fact of sensation, but in the intuitive facts of the reason. Mill shows that upon his admission, this cannot diminish the relativity of these cognitions. So, I assert, Mill, Kant, Berkeley, are equally inconsistent, in stopping half-way. If they take the leap at all, they should reconcile themselves to alight in the black abyss of' Hume. If the process with which they all set out were solid, it would prove the mere relativity of all knowledge, as well as of a part. And here is my practical ground for concluding that the process is a cheat. For how can I be required to adopt the self-contradiction: that I certainly know, I certainly do not know. that which I do know? That is consistent scepticism!

The chasm which has been unwittingly leaped in this process is, after all, very simply disclosed. Cognition takes place by means of some relation of the "Not-Me" to the "Me." Granted. Therefore, cognition is merely that relation? I do not grant it: this is a non-sequitur: and it begs the whole question in inquiry, which is this, whether by means of the relation of the "Not-Me" to the "Me," valid cognition arises. Let us illustrate by a similar non-sequitur, which betrays the sensualistic character of this whole way of reasoning. Says the Sensualist: "The relation of cause and effect is no other than that of simple immediate sequence: the notion of a power in cause is illusory. For has the mind any other experimental knowledge, than of the relation of sequence?" Reason answers: that it is by means of this perception of a sequence, that the mind sees efficient power in the cause; but our reason refuses to confound the seen relation by means of which the presence of the efficient power is known, with that known power.

This rational and necessary cognition we get in any instance, by means of the seen relation; but it is not merely the same as the relation. Let our common sense make a similar correction in this argument for the mere relativity of our knowledge, in all other cases. Our cognitions are first, immediate intuitive, and second, derived or illative; the validity of the latter depends on that of some immediate intuitive cognitions, which are premises. The question is: Are our minds validly entitled to any intuitive cognitions gotten by them in the occurrence of any relations of the "Not-Me" to the "Me"? To this question I reply: Yes. Shall I be now required to prove my affirmative? No: for that requirement would be paradoxical; it is absurd to prove a first truth which has no premise behind it from which to conclude a proof. And must I now assert again, that foundation-truth of logic, never denied by any thoughtful philosopher of any school, that there must be primitive judgments of the mind, or else there can be no derived ones? This, surely, is sufficiently trite.

We find, then, when we make this simple distinction, separating our intuitive cognitions from those mere relations of the "Not-Me" to the "Me" (which are the occasions of our intuition), that the question needs only to be stated aright, to answer itself aright. Has my mind a true, spiritual, seeing power? or is it only a term, a pole, of a relation between the "Me" and the "Not-Me?" When a telescope is placed at my eye, do I see the telescopic star? Yes. Is this visual perception something more than a contact of eye and telescope? Yes. But perhaps the image of the supposed star was in the telescope only? I have inspected the telescope, and seen that there was no star in it. But perhaps the image of a supposed star was, in the same sense, in the mind only? I reply, No. How do I know it was not? The question is a paradox; it is as though

one should ask me, How do I know that I know the thing which I know I know? We have gotten back to the ultimate fact, an intuition of consciousness. At that, every system of cognitions must stop; to refuse to stop there is to refuse to be an intelligent being; to derationalize one's self. And now, does not this ultimate issue which the question has raised, prove that this doctrine of the mere relativity of knowledge is virtually identical with that of absolute scepticism? For when this species of sceptic is driven from all his smaller cavils against our knowledge, he always retires to this question, as to his final stronghold: "If the certainty of all deduced truths depends at last on the validity of the primitive judgments which are their ultimate premises: and if these are undemonstrated; is not all our knowledge uncertain?" As M. Fouffroy has justly said, the very terms of this cavil show that it can never receive an answer from deductive demonstration. Yet. it is enough to add: Every such caviller knows, is inevitably necessitated to know, that no answer at all is necessary. He who seriously urges the cavil is as though one should say: "I am in contact with this tree; and, therefore, I cannot know my distance from it, because there is no room to introduce any foot, or yard-measure, or any other measure of distance, between my body and the tree." Every sane man replies, for that very reason the man's relation in space to that tree is known: it is contact: it is all the more certain because there is no room to interpose any measure. Light is the sole medium by which we see objects. what other medium, then, shall we see the light? There "Therefore light must be invisible!" Such is the logic of scepticism; and it refutes itself every time the eye is opened. Were it possible for any man to act consistently upon the sceptical cavil, the sole result would, obviously, be idiocy. It results, then, that we are intuitively certain, that while our cognitions are

by means of the relation of the object and subject, they are something more than that relation. All that we need be careful about is, that we separate faithfully between veritable intuitions and correct deductions on the one hand and imaginary intuitions and illogical deductions on the other. The mind is possessed of logical criteria for making that separation, if we will use them honestly. If our possession of such criteria is denied, then how has the sceptic or idealist ascertained the invalidity of any, or all, of our cognitions? With that reductio ad absurdissimum, I leave him.

The transition to the other error to be discussed may be furnished by the peculiar terms in which Sir Wm. Hamilton seems to delight in stating the doctrine of our primitive judgments. He calls them "incomprehensible." Now, the sense in which this is true is: that a primitive judgment cannot be comprehended under any prior truth, as conclusion under premise; for the simple reason that the first is already a first truth. But the word "incomprehensible" has a very different, and more common or popular meaning; that of inconceivable. It is by slipping from the one meaning to the other, that the false doctrine is reached that some first intuitions, absolute ideas to-wit, are incognoscible, or "unthinkable." The two propositions should be kept wholly distinct. A notion, or a judgment, is not a whit more incomprehensible in the latter sense, because in the former sense it is not comprehended, or reduced under a prior notion or judgment. Thus: The judgment that the doubles of equals must be equal, is just as perspicuous and definite as that the sums of three angles in all triangles are equal. The one is a primary, the other a deduced geometrical truth. Because our primitive judgments are not reducible under any higher premises: and because our ultimate abstract notions cannot be generalized under any notion more general; they are not, therefore, more, or less, inconceivable, or cognoscible, than our other cognitions. This is but one slight instance of those marvelous jugglings of words with which Hamilton has befogged his followers, and perhaps himself, in the "philosophy of the unconditioned."

"The unconditioned" he defines as the larger category, including both "the infinite or the unconditionally unlimited" and "the absolute or the unconditionally limited." But what is it to be "uncond tional" (in either of those senses)? He has nowhere told us: but the clearest inference to be drawn from his argument is, that the unconditional is that which is wholly or utterly out of relation to everything. Hamilton then proposes to show that it is impossible for us really to think "the infinite" or "the absolute," because the mind, in order to conceive them, would have to "think away from" the only conditions under which cognition is possible. Because these ideas can neither of them be positively represented, or realized, or construed to the mind; and here understanding and imagination would have to coincide: because such a spurious conception of either "the infinite" or "the absolute" as the mind might impose on itself, would be only a "fasiculus of negations," containing, in fact, no affirmative cognition: That we cannot think the unconditioned, because to think it would be to condition it: and this: because the separation of the "Not-Me" from the "Me," and the bringing of subject and object into the relation of thought, is, of course, the imperious condition of all thought. This is the amount of the argument, when stripped of repetitions, and separated from the objections to M. Cousin's semi-pantheistic doctrine of the impersonality of reason, which we have no interest to defend. A little perspicuous thought will convince us that this whole argument consists of two elements only: the assertion of a truism, and of an error. The truism is, that the mind cannot think as a truth a certain self-contradictory abstraction, termed "the unconditioned:" and this truism is then confused with the very different proposition erroneously asserted along with it, viz.: that the mind cannot think an infinite Being. The error is, that no cognition is valid which is not comprehended, or, in other words, represented or pictured in the imagination. And the practical root of the whole confusion is in the assertion that "here understanding and imagination coincide."

Let me, to prepare the way for a clear understanding of this matter, recall one or two doctrines of mental science, which are, in fact, only correct interpretations of every man's consciousness. That I may do this in the plainest way, let me define for myself a few terms. It shall be understood that we now use the term, "cognition," as the most comprehensive one, including all the contents of our intelligence of every species. We will use "idea" as including all our percepts or concepts of body and its attributes, so that we can consistently speak of our idea of a body, its size, its figure, its weight, its colour. The word "notion" we will reserve for that peculiar species of cognitions which represent neither bodies nor their attributes, but which are the rational conditions attending our ideas. I must forewarn you that the popular depreciation attending the sound of the word must be shaken off; we must not conceive of a "notion" as something capricious and unfounded. The word is, indeed, but a shortened form of the original root (in γινώσκω) which applear in "cognition," and would etymologically mean the same, leaving out the side reference to consciousness involved in the longer word. We will treat it, then, with equal respect, while technically limiting it to express our peculiar cognitions of spirit, space, duration, and relations.

I claim, then, (and the justice of the claim is sufficiently evinced by its consistency with the consciousness of us all) that our specific ideas and judgments are

conditioned upon the mind's à priori rational power of forming certain abstract notions. These are, and must he distinguished from all our percepts and consequent concepts of objective things, in that they are not figurable. We do not, we need not, and we cannot, construe them in conception or in imagination by any idea of figure or extension. That we are not to expect to do so, appears from the fact that it is the senses which show us all attributes of extension; and these abstract notions being in order to perception, cannot receive their form from perception. Thus, we can only cognize body in space. We can only cognize an event as in duration. We can only think an effect as from the power of its cause. We can only recognize moral responsibility in spontaneity. We can only recognize phenomena in subject. We can only think qualities as in their substance. We can only have a reflective judgment by the mind on condition of conscious self-identity. We can only construe the finite in relation to an infinite. We can only think the universe the sum of known effects in their First Cause. Each of these notions will be found as ultimate in simplicity as it is à priori. You can refer none of them to a simpler or more ultimate type. No one of them is given by sense-perception. Thus, when vou look at a distant building, and your mind posits it in space, your eyes do not see space. Space, as abstracted from the building in it, is empty, invisible. When you hear a succession of thunder-claps, your ear does not hear duration, but your mind posits the noises in successive time. Whence, then, your notions of space and time? Not from the senses, but the reason. The most important thing to be noticed for our present purpose, however, is, that these notions and ideas are all unfigured and incapable of figuration, and that for the reason that they are à priori in their source to all our perceptions of the figured.

Again: there is in each of these à priori cognitions a

certain incompleteness or inadequacy. Questions can be asked about them which the mind that entertains them can by no means answer. There is a limitation, sometimes a very narrow limitation; and yet the notion, within that limit, is perfectly valid, and of essential value.

Let us now notice the important fact, that these two restrictions are by no means peculiar to our notions of the infinite and absolute. The notion of space or time finite is just as unfigurable as of space or time infinite! To inspect your own consciousness is all that is requisite to convince you of this. Do you think that you can figure the empty space occupied by a balloon of thirty feet diameter, after the balloon is abstracted? You deceive yourself; you have retained the superficies of the balloon in your conception. You can no more have a complete conception of the one than of the other. But is finite space or time therefore "unthink-No one dreams of such an assertion. This obvious fact discloses the illusion under which Hamilton spoke, when he claimed that, in this matter, the power to understand and the power to imagine were coincident, and when he asserts it is a contradiction to say that the infinite can be thought, but only inadequately thought. He has here made two confusions worthy of a sensualistic thinker alone, and, in fact, coming from a sensualistic source. He has fallen into them because his attention was, like the sensualist's, for the time, preoccupied by the type of our sense-perceptions, which form so large and so obtrusive a portion of our ideas. If completeness of conception and this quality of figuration are tests of valid abstract notions. then we have none, finite or infinite. Hamilton would say, that a finite mind has no real conception of another mind's absolute knowledge, because, of course, he cannot have an adequate conception of it. His supposed conception of it is a mere illusion, a mere "fasciculus

of negations," because it is a contradiction to speak of the finite as comprehending the infinite; if it did, it would itself be infinite. Of course, a complete comprehension of the infinite would require an infinite power of thought. But to the other point, that unless the conception be adequate or complete, it is invalid; I reply by the very simple question: Is my conception of another man's finite knowledge complete? Obviously not. Says I. S. Mill: "I have no adequate conception of a shoemaker's knowledge, since I do not know how to make shoes; but my conception of a shoemaker and his knowledge is a real conception." I repeat, that Hamilton's notion of finite space, finite duration, finite cause, substance, spirit, is just as unfigurable, in this sense just as unimaginable, as of infinite space, time, or spirit. These objections, then, against the reality of our notions of the infinite and absolute are entirely invalid. To be urged consistently, they must be urged by Hamilton against all our abstract thought. And his mistake overlooks the common trait which must belong to all these notions, however valid, by reason of their priority of order to sense-perception.

The omission of this view by Hamilton is only worthy of a Sensualist. For the latter, it is very consistent to object, that this view represents us as knowing the definite only by the vague, the extended and figured only by the abstract and unfigured. For the Sensualist, it is consistent to cavil, that the progeny cannot be any more accurately defined than the parent-notions. His one-sided philosophy makes sense-perception the sole source of cognition. But, to the rational psychologist, the view I have propounded is perfectly consistent. For, first, he does not hold that sense is the sole source of cognition; he knows that the reason is possessed of its own cognitive powers. And that the abstract notion should thus be in order to the idea of the concrete, the unfigurable à priori to the figured concept, is precisely

what we should expect. This result of the inspection of our consciousness is itself a demonstration against Sensualism. This trait of the à priori notion which mediates the sense-perception is no weakness. The τὸ ὅτι is positively known; it is only the τὸ πῶς that is obscure. That pictorial feature is lacking which makes the images we combine or revive out of our sense-perceptions, apparently so vivid and palpable: only the latter can be figured in the mind; the former are known. And, second, that these notions are incomplete or inadequate, is just the inevitable result which must follow, from the fact that our minds are finite. Shall we petulantly disclaim positive knowledge, and stigmatize it as an illusion, a negation of thought, because it is partial knowledge; when the limitation of our nature reminds us that partial knowledge is the only kind we can expect to have; and when we find our thought alike partial, whether its object be finite or infinite?

Sir William Hamilton, in one of those "lucid intervals" which are so characteristic of his philosophy, and in which he so effectually explodes his own inconsistencies, has given the distinction between the comprehensible and the knowable, in terms which I have no desire to strengthen.

"To make the comprehensibility of a datum of consciousness the criterion of its truth, would be, indeed, the climax of absurdity. For the primary data of consciousness, as themselves the conditions under which all else is comprehended, are necessarily themselves incomprehensible. We know, and can know, only that they are, not how they can be. To ask how an immediate fact of consciousness is possible, is to suppose that we have another consciousness, before and above that human consciousness, concerning whose mode of operation we inquire. Could we do this, verily we should be as Gods."

If we separate the ambiguity from the word incom-

prehensible, which I have elsewhere explained, this is very correct. But it proves that the primitive notions are not the work of the imagination, but of the reason: they are not figured, but known.

In approaching nearer to the question: Have we any valid cognition of the unconditioned? I must believe, with J. S. Mill, in his examination of the philosophy of Sir William Hamilton, that the whole difficulty is in the vagueness of the notion expressed by the word "unconditioned." If it means the absolutely unrelated, then, of course, "the unconditioned" is incognoscible: for the essential condition of cognition is that the object and subject of thought shall come into some relation. If "the unconditioned" is the absolute totality of being, identified in one subjectum, then, of course, it is incognoscible by a finite power of thought. If the unconditioned is the absolute sum of all properties unified into one, including all contradictory properties, fortunately it is "unthinkable," and still more fortunately, impossi-But if these are the conclusions Sir William Hamilton has proved, then neither philosophy nor natural theology have been retrenched a single inch; for, fortunately, neither of them has a particle of use for these notions. An infinite eternal Spirit impossible to be in relation to any other being, the pantheist's imaginary God, identifying Creator and creature, matter and spirit. cause and effect, finite and infinite, in one contradictory substance; the unimaginable monster at once infinitely good and bad, wise and foolish, blessed and wretched, great and little; these we surrender to Hamilton's annihilating sword with cheerful equanimity. But let us drop this treacherous abstract. Let us speak of something infinite or something absolute. Let the question be: Have we any valid notion of infinite duration, infinite space, and infinite Spirit? Spirit not inclusive of all possible and actual being, but Spirit eternal in its own separate duration and infinite in its perfections. To all these questions I confidently answer, ves.

The finite mind would need to become infinite, in order to contain a complete and exhaustive conception of any infinite being. But we do not claim such a conception. The finite mind may remain finite, and yet contain an incomplete, yet valid, apprehension of infinite being. The dew-drop is but a tiny sphere, yet it a reflect in miniature the glories of the celestial sphere above it. That the finite mind thus thinks the infinite, is what we hold.

And, first: does it not seem odd that we should have a name for a notion absolutely incognoscible; that we should define it; that we should argue, pro and con, about it? Does Sir William Hamilton define what cannot be thought? The evasion which he suggests from this ridiculous attitude is, that he defines it only by negatives, and therefore the seeming cognition is only a negation of thought. But many a definition which is negative in verbal form, is yet positive in signifigance; and when, for Hamilton's shadowy, abstract unconditioned, we put an infinite something, infinite Spirit, our definition becomes clearly of this kind. Infinite (unfinite) Spirit, is Spirit existing beyond all limits of space or duration whatsoever. The only negative notion is the negation of limit; the Substance existing beyond all limits is positive, inexpressibly positive; all the more positive because of this absolute removal of limitation. Here we see that Hamilton was entirely unwarranted in saying that the notion of an infinite thing is a mere "fasciculus of negations." He charges ipon us, that we impose upon ourselves, as a valid notion, what is only a negation of thought. But it turns out that it is he who has imposed on himself by a phrase negative in form. I repeat: Let the question pe of something infinite; then that being is positive, and he only negation attending the notion is the negation of limits; a negation which leaves the thing the most positive of all positives. In this connection, we may

refer to the fact, that even in the most exact of sciences, mathematics, the infinitely great and the infinitely little frequently enter as elements of equations; and that these strict reasonings lead to certain results well attested by logic and experience. Is it not strange, again, that notions wholly "unthinkable" should be so successfully thought as to lead us to some of the most recondite laws of nature? We are reminded, here, of the caustic, but just, sarcasm of J. S. Mill, that if Hamilton is right, one must "suppose that conjuring is a highly successful mode of the investigation of nature!"

Hamilton, in arguing that our cognition of the infinite is illusory, proceeds, in one place, precisely like Condillac, or any other Sensualist. He represents our minds as attempting to cognize the notion in thought "only by an endless synthesis of finite wholes." He says that the realization of the idea by this process is obviously impossible, because an infinite time would be required for the mind to pass successively through the additions. So. argues he, should we attempt to think the absolutely indivisible, our minds would have to expend an eternity in representing to themselves the successive divisions of the finite. All this is perfectly worthy of Condillac or of Hobbes. Were our notion of infinitude or of the absolute an empirical idea or a deduction, this logic would be very appropriate; but against the existence of such an à priori notion, given intuitively in the mind, it is irrelevant. We do not attain to the notion of infinitude by this additive process. This is not a correct analysis of our consciousness. The proof is, that when we have, by such an additive process, reached the conception of the indefinite, the conception which mathematicians sometimes describe as "larger than any assignable quantity," this still stands in the very same antithesis in our minds to the infinite, which we perceive between the infinite and any definite quantity. Let us, for instance, ask ourselves: what is the difference between

our notion of an empty sphere, ten thousand miles in diameter, and infinite space? Let us now increase the diameter of our sphere, by the addition of myriads of miles to myriads of miles, until the imagination is fatigued, and again ask ourselves what is the difference between our notion of this larger empty sphere and of infinite space? The very same as before! the difference between space bounded and space absolutely freed from limit. The true statement of what passes in our consciousness is this: The concept of extension finite, and the notion of space infinite, are related by necessary contrast: the thinking of the one imp'ies the thinking of the other. Hamilton has himself stated this, when he says that the idea of any space, however vast, is necessarily attended by that of space still outside the former. So, I add, the idea of any length of time, however vast, is inevitably attended by the notion of other time before and after the termini of the former. There, at once, is the notion of the infinite inevitably cognized, though never comprehended (in the sense of being embraced or included in the imagination). As in a picture, light implies shade; so, in our consciousness, the thought of the finite, when we carefully examine its conditions, implies that of the infinite; and that of the dependent implies that of the absolute. When looking at the picture, we often forget to notice the shaded parts, because the lights are what interest our attention. But as soon as we proceed to analyze the picture faithfully, we see, at a glance, that the lights can only be by means of the shades. So, when we glance carelessly at our own consciousness, the percepts derived from sensation strike us, and engross our attention by their clear outline and distinct light. But when we analyze more faithfully, we soon discover that the unfigured notions of the reason are the necessary background of our percepts.

Says Sir Wm. Hamilton, the unconditioned cannot

be cognized, because we only know anything by distinction, by difference, by plurality. Absolute identification of the "Me" and the "Not-Me," or of the past and the present cognition in consciousness, would absolutely extinguish cognition. Very true: and this is a very perfect refutation of that form of pantheism which is reached by the absolute idealism of Hegel. I thank Sir Wm. Hamilton for it. It may also be a very sufficient refutation of Cousin's semi-pantheistic scheme of the impersonality of the reason. I have no vocation to defend that error. But this argument has no application whatever to disprove my ability to think infinite time, infinite space, an infinite God, Absolute First Cause. I am not guilty of the profanity of identifying myself and God. I am a distinct being, a poor, puny creature. He is another distinct Being, great, personal Creator. There are two! There is difference, plurality; which, as Hamilton shows, is the condition of cognition. Surely Hamilton would not be understood as having fallen into the shallow sophism, that because difference is necessary to cognition, therefore plurality in the object is necessary to it. That folly is refuted by every cognition of units which takes place in our minds. I repeat, this majestically shadowy argument is but a majestic illusion, unless God and the creature, God and space, God and time, God and all His opposites are identified in a To $\pi \tilde{a} \nu$. That monstrous notion, fortunately, is not only "unthinkable," but impossible to be true. So, when Hamilton asserts that the notion of "absolute cause" is "unthinkable," because cause must be in relation to effect; but the Absolute is that which is completely unrelated,—I reply: against the vain dream of the Epicurean God, this may be very conclusive; and we wish him joy in the work of its demolition. But what natural theology means by absolute Cause is, first, a cause that never was in its turn an effect; an independent Cause; and second, a Cause

in actual relation to all dependent effects. Of course, the notion of a Cause impossible to be in relation to any effects, is a perfect contradiction; and it is also the perfect opposite of our notion of our divine absolute Cause; for He is not only a Cause able to be related, but actually related to all effects.

The Hamiltonian is accustomed to sum up his demonstration in the enthymeme: No one can think the unconditioned, because to think it is to condition it. Verbally, this statement has a formal correctness; but logically it is a mere play upon the ambiguities of the vague word "conditioned." What is it "to condition" a notion in thought? Is it to place the notion within the necessary conditions of human thought? Then, of course, the statement is true, and a mere truism; it only means that in order for man to think something, the something must be in the forms of man's thinking. This is no more than to say that, if a man is to see, he must see with his eyes. Or does the famous statement mean that we think nothing, save as we include and circumscribe it within a concept of our imagination? Then it is positively false. For I have shown that no one of the abstract notions of the reason is, or can be, thought in this way; yet we unquestionably do and must think them. I reminded the student that we no more think empty space finite by circumscribing it within a figured concept of the imagination, than we do infinite space. We no more think power in cause, or relation, or identity, or spirit, in this way, than we do infinite space. Let us eliminate the ambiguity, and state the argument thus: "One cannot think an infinite something, because to think it is to limit it;" and we then see that it is a mere begging of the question. we limit it, in the sense of circumscribing it by a figure? No. We think that it is, without figuring what it is. The enthymeme is just as good to prove the falsehood, that I cannot think self-identity, because to think is to limit

(i. 'e. figure) it. But I do think self-identity; I am obliged to think it, virtually, every time I think reflectively at all. The sum of the matter, then, is: that I can and do think the infinite, because I can think it without limiting it; although I cannot comprehend it without limiting it.

These unnecessary and vague speculations of the Hamiltonians are attended with two baleful effects. One is, that they represent our knowledge as the result, not of competency, but of impotency of the mind; not of faculty, but of inability. The necessary and fundamental notions of the reason, according to this view, are adopted only because the mind is unable to avoid both of two antithetic absurdities. The rudiments of all our knowledge are grounded in primitive notions, to which the mind seems to be impelled simply upon the principle that one absurdity is not so bad as two: these being the alternatives between which the reason moves. Hamilton, on Cousin, p. 22. The mind . . . is "unable to understand as possible, either of two extremes: one of which, however, on the ground of their mutual repugnance, it is compelled to recognize as true." Is not this but saying that the condition of our knowledge is, that we shall believe something which we see is impossible to be true, in order to avoid believing two impossible things which are, moreover, contradictions? What more practical encouragement could be given to universal scepticism? The other deplorable result of this philosophy, so-called, is, that it makes a saving knowledge of God impossible. we cannot think the unconditioned, and God is unconditioned, then how can we know God? This root of death, we shall now see Hamilton's admirer. Prof. Mansel, watering; and the practical atheist, Herbert Spencer, rearing to its fell maturity.

Mr. Mansel, in his "Limits of Religious Thought," aims to lay the basis of a philosophical refutation

against the Rationalists. When they object against Revelation, "This or that doctrine cannot be revealed, because it is inconsistent with God's character: " Mr. Mansel aims to meet the cavil by saying that God's nature is not cognoscible; and, therefore, we are not competent to judge what is, or is not, compatible therewith. There is, of course, a large scope, within which the reverent mind holds this humble view; but he, in aiming to avoid Scylla, has run into Charybdis. The method of his argument is purely Hamiltonian, but the greater perspicuity of Mansel's mind and style, and the honest boldness of his temper, have caused him to unmask and assert pernicious consequences from his master's "philosophy of the unconditioned," from which he would probably have recoiled. His definition of the infinite is the same with Hamilton's. He defines the absolute, first, as that which is independent of all relation. But for this definition, which is correct, in a correct sense, he tacitly introduces a wholly different one, just as soon as he begins to reason. "The Absolute" which he proves incognoscible, is an imaginary something impossible to be related in any way to anything. Now, of course, since all knowledge is by a relation, there can be no knowledge of that which is impossible to be related. But that something is not our God, the God of the Bible. He does not need to be related to other being in order to His existence. True: He existed alone, uncaused by cause outside of Himself, independent, and sufficient unto Himself, countless ages of His eternity. But He is capable of entering into relation to other beings. He has done so by becoming our Creator, Ruler, Benefactor, Revealer; and in doing so He has become cognoscible to us; not completely, yet truly cognoscible within certain useful limits. How simple and obvious is this statement! It is surprising that such a statement, intelligible to the Christian child, undisputed by all plain Christians, and indisputable by Mr. Mansel, should yet explode his whole argument. Yet this it does. The whole is but this one ignoratio elenchi; substituting, in his argument, the inference that a something which is impossible to be related to any other being must, therefore, be incognoscible; and then inferring the wholly different statement that a Being not dependent on relation must be incognoscible.

This easy solution of his sophism explains all the several instances of his argument. "The absolute," he says, "cannot be conceived as Cause: for causation is a relation." Very true: The impossible to be related cannot. But if God, who is by nature independent of relation, and vet, because Infinite, capable of assuming any relation to which His infinite wisdom, goodness, and holiness may prompt Him, sees fit to enter into relation with creatures. He thereby becomes known: known through those very relations, and truly known to us, to that partial extent compatible with our finitude. Absolute," says Mr. Mansel, "must be the sum of all being, and must possess in an infinite degree all possible attributes, even those which are contradictory." Hence, as we cannot refer contradictories to the same subject, we cannot think the Absolute. We are very happy to believe that such an absolute as this is "unthinkable." But we are equally certain that it exists nowhere, save in the diseased fancies of pantheists, and is utterly unlike the God whom we are commanded to know and love. Once more: Mr. Mansel argues that "the Absolute" cannot create in time. For it must be both infinite and immutable. If the created acquisitions were of a nature to make the Absolute Cause any better or happier, or greater in any way, then, before it created them, it was not absolute. If they make it any worse, then, upon creating them, it ceases to be absolute, and, moreover, shows itself mutable. The plain reader cannot but be mystified by a logic which seems to result

in this conclusion: that because God is omnipotent, for that very reason He cannot do what He pleases! His power is too perfect to be practically any power at all! But the solution of the riddle is given by a very simple question: Suppose that in the judgment of the infinitely wise God, non-action as to a certain work had once appeared the best thing, and that the same infallible judgment has concluded that now a time has come when action is the best thing? The immutable Being then passes, at His chosen time, from non-action to action, precisely because He is immutable. But it is unnecessary to multiply these instances of vicious reasoning. The clue which has been given leads us safely through them all.

The worst results of these speculations are seen in their application to our knowledge of God's moral perfections. If it is impossible for us to know Him as He is in Himself; if all our knowledge is but relative, and the finitude of the Self, the Ego, who is the subjective pole of the relation, necessarily perverts every cognition of the infinite and self-existent Being, which we have; then God's moral character must not be supposed to be what we apprehend it for. Mr. Mansel supposes that this conclusion gives him a great advantage against all Rationalists, when they cavil against the contents of Revelation; man is utterly incompetent to know what proceedings are, or are not, consistent with the truth. goodness, justice, or purity of God. Instead of regarding these as "communicable attributes," in the sense of the old divines; instead of believing these virtues in God to be the same virtues in kind, of which we see feeble and imperfect and partial reflections in holy creatures, but absolutely exempted from all the errors, defects, and limitations, and exalted and purified into infinite excellence; Mr. Mansel teaches that there is only "an analogy" between the human and divine virtue. We do not know that the benevolence and

equity of a Washington are of the same kind, abating their imperfection and limitation, with the infinite benevolence of our Heavenly Father: we only know that God has two infinite qualities, called divine benevolence and justice, which are related to His volitions in a manner analogous to Washington's. Must it not follow that the virtues of the man Christ are also of a different kind from that of His Father; not like, but only analogous? Then, Christ is practically no longer "the image to us of the invisible God:" it is no longer true that "he who hath seen the Son hath seen the Father!" For, let the student remember, that God being, according to Mr. Mansel, wholly incognoscible as He is in Himself, we are forever in the dark as to the real nature of this "analogy" between the known and the unknown virtue. We know what the human virtue of a holy man is. Knowing this, if we knew the analogy between it and the divine, we should positively know something of the divine as it is in itself. For example: as soon as you tell me that an unknown quantity, x, bears a ratio to a known quantity, a, and that ratio is also the known number b. I shall ascertain what x is. But Mr. Mansel insists that God, as He is in Himself, is incognoscible; it must, of course, be held, then, that the analogy is equally incognoscible which is supposed to subsist between the known and the unknown excellence. Now, the result of all this, a result even worse than Rationalism, is that the sincere love and worship of God become impossible. Paul being witness, "the Unknown God" can be only ignorantly and superstitiously worshipped. If I cannot know what I mean, when I call the Father in heaven "merciful," "benevolent," "true," "holy," then I cannot sincerely say that I honor or love Him as such. religion is reduced to a species of hypocrisy, or else to the mercenary truckling of the courtier, cowering before brute force. It is a strange spectacle which we

here witness, of a Christian divine and a teacher in a great Christian university, following a visionary philosophy to conclusions so contradictory to his own Bible. In that book we read such precepts and facts as these: "Acquaint thyself with God, and be at peace," "This is eternal life that they might know thee the true God. and Iesus Christ, whom thou hast sent." "No man hath seen God at any time, save he to whom the Son hath revealed him." "He that hath seen me hath seen the Father." He is "the brightness of the Father's glory, and the express image of his person." "Be ve perfect, even as your Father in heaven is perfect." "Let us make man in our image, after our likeness." "Put on the new man, which after God is created in righteousness and true holiness." "We all, with open face, beholding as in a glass the glory of God. are transformed into the same image, from glory to glory, even as by the Spirit of the Lord." "He hath made us partakers of the divine nature." How vain is it, unless we design to flout the authority of Scripture. to impinge against these express declarations! Here we have a sufficient proof that these philosophical juggleries are all hollow. These great truths, that God is really (though not completely) known to them that seek Him, are the practical foundation of all the holiness and all the homage of earth and heaven. This discussion presents us with another feature still more surprising: that it is the infidel philosopher, John Stuart Mill, who has most effectually intervened to defend the honor of God from these aspersions of one of his own professed heralds. One can scarcely refrain from expressing the same sense of incongruity which is expressed by the Apostle Peter (2d Epistle, 2:16), when he remembered the providential agency employed to rebuke the madness of the prophet of Pethor.

But Mr. Mansel would justify himself by citing the magnificent exclamation of Zophar, the Naamathite:

"Canst thou by searching find out God; canst thou find out the Almighty unto perfection? It is higher than heaven. What canst thou know, deeper than hell; what canst thou do?" He would also add a multitude of citations from great divines, where they have expressed the same truth, sometimes in terms just and fair, and sometimes in terms of exaggeration or metaphor. I reply, that his doctrine is wholly another thing. That no finite mind can have adequate knowledge of all the glory of the infinite God, is an admission made by all men, of every age, who reflect. But that God, as He is in Himself, is incognoscible; that our whole knowledge of Him is merely relative: that none of His attributes are intelligible enough to man to enable us reverently and honestly to estimate the glory of the divine consistency: these are, surely, other doctrines; and equally sure is it, that they would make sincere religion impossible, if fully adopted. There is no Christian, simple or learned, whose reason does not cordially bow to the admonition:

" Judge not the Lord by feeble sense."

The most profound are most deeply convinced that "His ways are above our ways, and His thoughts above our thoughts, as far as the heavens above the earth." We fully concede that in acting for Himself upon those principles of justice, truth, and goodness, which He has enjoined upon us, it is proper that He should take to Himself a width of discretion unspeakably and incomprehensibly beyond that which is allowed to us feeble creatures. It is justified by His sovereignty, as proprietor of all, and by that wisdom which weighs an infinity of facts unseen by us. Hence, when I am asked to suspend my judgment upon some mysterious anomaly of His providence, because I cannot understand enough of the grounds of the divine action to judge aright, I cheerfully obey; he would be insane who

did not. But when I am required to say that in the case where the grounds of the divine action are declared to me, God's moral perfections make that same principle of action in Him excellent and glorious. which, in me, those same perfections would condemn as iniquity; when I see that it is impossible that unknown conditions can exist to change the nature of the act, then it is inevitable that I must demur. For this admission would, if consistently made, leave me incapable of religion. If I am not to adore God for the very same qualities (purged of defect, and made absolute in infinitude,) which His word and spirit have taught me are praiseworthy in man and God alike, then I do not know how to adore Him at all. If I do not know that God's benevolence is the same kind of benevolence which appeared in Jesus, and which good men, taught by God's Spirit, learn to imitate in becoming Christlike, then it is impossible for me to know whether I adore the divine benevolence or not; and if I say that I adore it, I am but using the language of hypocrisy. So, when we pass from the sphere of duty to that of dogma, I am prepared to believe a thousand things which transcend my reason; for a little reflection has taught me that not only in theology, but in psychology and physics, there is no knowledge which I possess that does not involve something inscrutable in its connected truths. But if either a person professing inspiration, or any other, requires me to believe what contradicts the very foundations of my reason; if after all the modesty, the caution, the humility, possible to be employed by one who really loves the truth, I see clearly what the assertor means, and see that it inevitably contradicts and overthrows intuitive principles, then I can only demur. For, should the admission of this contradiction be consistent, then, in losing trust in the very sources of cognition, as they exist in man and for man, I should have lost the very capacity for rational belief; the proper result would be not faith, but idiocy. When, for instance, Mr. Mansel would defend that self-contradiction of the Jesuit theology, Scientia Media in God, by referring me to the inconceivable greatness of His gift of omniscience, he is giving me, not a mystery, but a contradiction. For the advocates of this scientia media begin by defining it as a knowledge existing only by means of a given condition. They then proceed to deny the existence of that condition. And then they require me to admit that this impossible knowledge may exist in God, because His mind is infinite! But my reason obstinately replies, that it can never be the result of infinite, that is, of absolutely perfect knowledge, to lead God to adopt that which is a self-contradiction in itself. It is, doubtless, all the more impossible for Him to think it, than for me, by reason of the absolute perfection of His thought.

These speculations Mr. Herbert Spencer eagerly seizes and adopts as his own. The refutation which has been given applies fully to his statements also. only remains that we shall notice his assertion, that since a God cannot be known as He truly exists in Himself, all the notions which we suppose we have touching a God, are a vicious anthropomorphism. We can only imagine the nature of God's thought and purpose according to the nature of our own minds; but, he argues, we can never know that there is such a resemblance; and, therefore, our conclusions must ever remain invalid. Thus, says he, men vainly infer God's thought from the contrivances which they imagine they see in His supposed works. When we adapt anything to a designed end, we, of course, plan and contrive. But when we jump to the conclusion that God, therefore, does the same, and on that conclusion found a natural theology, the whole structure is vicious. It is all founded on the arrogant and baseless assumption that our thought and contrivance are the model of the

mind of God. This is as unwarrantable, he asserts, as though the watch (in the well-known illustration of Dr. Paley), becoming somehow endowed with consciousness, should conclude that the consciousness of its unknown cause must consist of a set of tickings, and of motions of a spring and cogs, because such only are its own functions. This simile betrays the sophism at once: The supposition is impossible. If the watch could have a rational consciousness, it would not be a material machine, but a reasonable soul: and then there would be no absurdity whatever in its likening its own rational consciousness to that of its rational Cause. When complaint is made that all our natural theology is "anthropomorphic," what is this but complaining that our knowledge is human? If I am to have any knowledge, it must be my knowledge; that is, the knowledge of me, a man; and so, knowledge according to the forms of the human intelligence. All knowledge must be in this sense anthropomorphic, in order to be human knowledge. To complain of any branch of our knowledge on this score is to conclude that we know nothing. This single remark is enough to show how captious and unfair is the cavil.

But why should our knowledge of an infinite spiritual being be suspected as untrustworthy because it is attained according to the legitimate forms of human thought? It can only be because it is suspected that the notions of the divine object of thought are transformed, in becoming ours. But, now, let it be supposed that this great first Cause created our spirits "in His likeness, after His image," and the ground of suspicion is removed. If our reason is fashioned after God's, then in thinking "anthropopathically," we are thinking like God. Our conceptions of the Divine Being will then be only limited, and not transformed, in passing into our kindred, but finite, minds: they remain valid as far as they reach. But it may be said: This

is the very question, whether a Creator did form our spirits after the likeness of His own; hence, the advocates of natural theology must not assume it as proved. Very true. But I remark, first, neither must our opponents assume the opposite as proved: They must not "beg the question," any more than we. And I add, second: That the principles of our reason compel us to hold that truth is intrinsic and immutable. If a proposition is true, then it is true everywhere, and to all grades of minds. When once we are certain that the angles at the base of an isosceles triangle are equal, then we are obliged to believe that they are equal in any other planet, and in all the heavens, as in earth; true to the angelic mind that knows an isosceles triangle, as to the human: and as true to the divine mind as to the creature. But if truth is true to all minds, then the cognition by which truth is reached, must have something essential in common for all minds. The first necessarily implies the second. This, then, is the noble prerogative of the Reason, that its very nature, as an agent for the apprehension of Truth, establishes its kinship to all the realms of mind in heaven and earth. the attainment of Truth, whose original dwelling-place must be in the eternal bosom of God, the reason sees its heirship and recognizes itself as the offspring of God. Do we, can we, attain unto any assured truth? Then, to that extent, we know that we have been fashioned to think after the pattern of Eternal Truth. It is manifest, then, that the dogma, "God is the absolutely unknowable." leads us back to the gulf of absolute scepticism. If we can know nothing of Him, then we can know nothing of anything beneath Him, because we cannot know the validity of a single law of thought according to which cognition seems to take place, for the obvious reason that we cannot know whence those laws are. The postulate which we claim, is not gratuitously assumed: it is assumed by reason of as valid logical necessity as

any of our other conclusions from first principles. I may add, that it receives a continuous confirmation in the course of all our other thinking. Assume that Truth is one and eternal, and that, therefore, thought is thought in earth and heaven, and is the same so far as it is truthful, and we see that the coherency of all subsequent conclusions with each other, and with experience, both as to nature, God, and providence, rises continually with a cumulative evidence that we have begun with the right principles.

When stating Herbert Spencer's view to you, I showed you briefly that it was practical atheism. A being of whom we can know nothing is practically nonexistent. We dare not ascribe to him any attribute: and, therefore, we cannot exercise towards him any definite feeling of trust, reverence, or love. We know not what to expect from him, nor what service to render him. How can any one be more completely "without God, and without hope in the world?" The best established rules of thought bring us to the same atheistic conclusion from these premises. The mind only knows being by means of its knowledge of properties. The cognition of the essentia is in order to the cognition of the esse; if the quiddity of any notion is wholly unknown, then its entity must be more so. Let the minds of men be forced, then, to this doctrine, that they can know absolutely nothing of what God is, and they will no longer believe that He is. Has not Mr. Spencer, in fact, verified this result himself? After setting out with Mr. Mansel's proofs that God is only the "Great Unknowable," he ends by substituting for Him a material Force.

The Hamiltonians, after undermining all our knowledge by making it relative, seek to found it again by resorting to "belief," as a valid ground for receiving truths, distinct from knowledge. According to their leader, belief is much more extensive than knowl-

edge. The primary data of the reason are unproved and (in the Hamiltonian sense) incomprehensible. But they are held by a faith. Thus, all knowledge begins in faith; and belief is in order to knowledge. First truths, we believe. Conclusions deduced from them, we know. Thus, also, they seek to give us back a God, after having taken Him away with their doctrine that the absolute and infinite are incognoscible. God is, indeed, unknowable: but He is believable, say they. We accept His existence, not by knowledge, but by faith. Now, as I hold that their supposed emergency is a mistake, I regard their proposed remedy for it as a worse mistake. The difficulty does not exist of knowing our legitimate primitive and infinite notions as valid cognitions. But, if it existed, this tender of a "belief" in them, which is something else than knowledge, would be only mischievous.

I object, first: that the word "belief" is too ambiguous. It is often used popularly to express a conviction which rests on only probable evidence and is of inferior certainty to knowledge. Thus, one will say: "I believe my friend is now alive, but I do not know it; for I have not seen him recently." Now, does Hamilton mean to be understood as allowing this meaning, as teaching that our conviction of first truths is only probable and comparatively weak, while our conviction of deduced truths is positive? Of course he does not; he knows too well the obvious retort, that no deduction can contain more certainty than its premises. But this tender of faith instead of knowledge, as the evidence we have of the primary data of reason, tends none the less to disparage the validity of our knowledge. By belief, again, some philosophers, as McCosh, seem to designate that conviction which we have of truths formerly known by intuition, but now known by reminiscence. Yesterday, I had visual perception of a horse; I saw that it was grey. To-day, I believe it is grey, relying

on the fidelity of my recollection. But this is not Hamilton's meaning; and, indeed, it is opposed to his; for, while he applies the term, belief, to the first intuition, McCosh applies it only to the remembered concept. Hamilton, if we may accept his own definition in its obvious sense, uses the word "belief" in its proper and characteristic sense, as a conviction grounded in trust. This is what discriminating men, this is what the Scriptures, mean, when they distinguish knowledge from belief. We know those things which our own cognitive faculties attest; we believe those things which other persons whom we can trust attest to us, in the absence of personal knowledge. I know that when I was last in Richmond, the River James was flowing, for I saw it. I believe that the River Thames is flowing, which I never saw, because many people whom I can trust assure me of it. Now, therefore, there is a contradiction in saying that we hold the primary data of the reason, not by knowledge, but by faith, by a trust. Trust on whom? On God? Sir William Hamilton will not make that answer, for he knows that to be the central feature of Mysticism. The Mystic answers, that he knows the necessary dicta of the reason to be true, only because his faith in God's truth assures him that his Maker would not so have constructed the framework of his spirit as to compel him to believe what is not true. But Sir William Hamilton cannot be ignorant of the retort of the sceptic: How did any one find out that there had been a Maker, or that this Maker is certainly trustworthy, save by the authority of the primary data of his own reason? The Mystic moves in a circle; he cites a God to testify that the necessary data of man's reason are trustworthy; but he has to cite those data to testify that the God is trustworthy. Now, it is perfectly true, that to doubt the truth of the Maker is to plunge into universal doubt; for, if He who made our faculties may deceive us, then He may have made

our faculties so that they will deceive us. So far, the Mystic has the right. But when he advances against the sceptic to any more positive result, he falls into his vicious circle. If then our conviction of a first truth of our own reason is a faith, a trust, I return to my question: A trust on whom? The only answer is: On my reason. But my reason is myself! (Or, will the Hamiltonians turn to that doctrine of the impersonality of the Reason, which their master demolished, in Cousin?) Thus, we see that the statement is merely a deceptive play upon words: for the very condition of a faith, the testimony of another, is lacking. When I am convinced that the horse I saw was grey, I have no faith. because there is nobody, except myself, to trust about it: there is knowledge. When my reason sees implied in a universe of effects an absolute Cause. this is not a faith, but knowledge; there is, as yet, no other witness than my Reason, which is myself.

But, last: every one is familiar with the maxim, that streams do not rise above their fountains. Conclusions rest on their premises. There is, then, no other form of validity for the conclusions than that which sustains the premises. If, as Hamilton says, the ultimate facts of consciousness "are given less in the form of cognitions than of beliefs," then the deductions of them are less cognitions than beliefs. According to Hamilton, we hold the principles of geometry, for instance, by faith, but the demonstrated theorems by knowledge. All men of common sense will join me in saying: that, if we hold the principles only by faith, then we hold the conclusions therefrom only by faith also. But if we know conclusions, we must also know the premises. Hamilton confirms this refutation of himself in these lucid words ("Dissertations on Reid," page 763): "The principles of our knowledge must be themselves knowledge." The weakness of any other doctrine is evident from this fact, that there is no generic distinction between

that judgment of the reason which sees a first truth, and that which sees a valid relation between premises and their next conclusion. The difference of rational function is in the circumstances, not in the essence, of the cases. When we have said, "premises and their next conclusions," have we not implied that this perceiving power of the reason which sees that relation must be immediate, and, in that sense, intuitive? Surely. For how shall a medium be found between premises and their immediate consequence? If, then, reason, in its discursive or deductive exercise, is cognitive; reason. in its intuitive exercise, is equally cognitive. This erroneous subterfuge, which admits that the latter is not cognition, but only "belief," is a gratuitous concession to absolute scepticism; gratuitous, because that system of absolute self-contradictions is worthy of no concessions: and mischievous, because it leaves us defenceless against the sceptic's cavils.

The student should be guarded also against inferring from the correct definition of belief or faith, that it is unreasonable. Faith is our conviction of a truth from the testimony of another whom we trust. Is it, therefore, unreasoning or contra-rational? By no means. In order that the testimony shall cause belief, it must be credible. Testimony not judged credible propagates no conviction. Now, when we make this statement, we are not speaking of the numerous instances in which men concede a certain vacillating assent, prompted by mental indolence and self-indulgence, to testimony, about whose real credibility they do not trouble themselves. It may be, that in many, this species of credulousness goes very far, and grows into a habit. It does not deserve the name of belief; and it is a mere abuse of that precious means of learning. But then, have not all men's other rational processes their abuses likewise? If the fact that a given function of the reason is often abused, disparages it, then all must be disparaged. I

repeat: every conviction of mind, worthy of the honorable name of "belief," takes into its account the credibility of the testimony believed. But how can this quality of credibility be ascertained? Rationally, and in that mode alone. By this simple view, we learn that, although belief has the peculiarity of grounding conviction upon the testimony of another, yet this circumstance does not at all make belief a less rational conviction than any other legitimate cognition. There is no strife between sound belief and reason. When the witness is credible, then, to believe is supremely reasonable, and is the very dictate of reason herself.

CHAPTER XI.

ORIGIN OF A-PRIORI NOTIONS.

In the last chapter, in order to simplify the discussion, a postulate was assumed as to the order of relation between the à priori notions and the primitive judgments of the reason on the one hand, and our experimental perceptions on the other. I assumed that the former, though arising upon occasion of some connected perception, are yet original in their true cause, and are determined from within by the constitution of the mind, and not from without by the power of the objects of sensation. This is, in fact, the centre of the whole battle-ground between the Sensualistic and the Rational philosophy. We must, then, return and fortify our tenure of it, not by assertion, but by proof.

An important discrimination should be made, in advance, concerning the nature of this proof. It must be, to a certain degree, and in a certain sense, à priori. Of course, it is preposterous to deduce a primitive judgment from premises; for, if primitive, it has none. But yet, there is a species of discussion to which all men sometimes resort, in order to determine the real character of a given notion or judgment, which consists not in deduction, and is therefore not à posteriori, but which consists in the ascertainment of the conditions in which that judgment exists in the mind. For instance: when I see an effect, I judge there was an efficient power present in its cause. The very question is, whether that judgment has premises before it—that is

to say, whether it is a deduction (or induction). For, if it has none, it is a primitive judgment. Now, this question is, of course, not to be settled by such deduction as would imply premises before the primitive judgment. We do not propose to be guilty of such an inconsistency. But it is to be settled by a faithful inspection of the conditions in which that judgment lies in consciousness. While we cannot deduce from premises a primitive truth, yet we may be able to show that the judgments, which Sensualism would fain make the premises of that truth, are not premises to it, and thus we may vindicate its primitiveness. Such will be the nature of our inquiry.

When we recur to the history of the rise of the Sensualistic philosophy, we see Locke and all his followers attempting to derive everything from sense-perceptions. Not content with denying the doctrine of innate ideas, Locke made the mind a tabula rasa, ready to receive impressions from without, but with nothing impressed on it by nature. In carrying out this idea, he and his followers attempt to resolve everything into results of sensation. As I have already remarked, the common error of all their processes is the mistaking of mere occasion, for cause. Inasmuch as they perceived, very justly, that the rational notion, or judgment, only arose when sense-perception occurred, they jumped to the conclusion that the latter caused it. The mistake is a very old one; as is also its lucid correction. Thus Socrates, in the Phaedo, criticizes this confusion, which "I might he found in the scheme of Anaxagoras. compare him to a person who began by maintaining generally, that mind is the cause of the actions of Socrates; but who, when he endeavored to explain the causes of my several actions in detail, went on to show that I sit here because my body is made up of bones and muscles; and the bones, as he would say, are hard, and have ligaments which divide them, and the muscles are elastic, and they cover the bones, which have also a covering or environment of flesh and skin which contains them; and as the bones are lifted at their ioints by the contraction or relaxation of their muscles. I am able to bend my limbs, and this is why I am sitting here in a curved posture; that is what he would say, and he would have a similar explanation of my talking to you, which he would attribute to sound, and air, and hearing, and he would assign ten thousand other causes of the same sort, forgetting to mention the true cause, which is, that the Athenians have thought fit to condemn me, and accordingly, I have thought it better and more right to remain here and undergo my sentence: for I am inclined to think that these bones and muscles of mine would have gone off to Megara or Bœotia-by the dog of Egypt, they would !--if they had been guided only by their own idea of what was best. and if I had not chosen as the better and nobler part, instead of playing truant and running away to undergo any punishment which the State inflicts. There is surely a strange confusion of causes and conditions in all this!"

Such, putting sensations for bones and muscles, is the sensualistic analysis of our acts of intelligence. It argues, that our abstract notion of space is an empirical result of our observation of two bodies separated, or two separated parts of one body; that our abstract notion of duration is but a derivation from observed successions in our consciousness; that our abstract notion of self-identity is, in like manner, the experimental result of a comparison of a second conscious state with a first, and that our judgments supposed to be axioms, are rules learned from observation. Now I would begin with the simplest, which is also the most general and conclusive refutation, by remarking what no one will deny, that a mind is an intelligent agent of some sort. Has it any permanent essentia whatsoever?

Surely; for esse without essentia is a thing incognizable. There are, then, some permanent attributes; and must not these be powers of some kind? No one will say that these attributes are only passive powers, and yet the mind is an agent. It must, then, although not furnished with innate ideas, have some innate powers, determining its own acts of intelligence. It is related that when the plan of Locke's Essay was first reported to his great cotemporary, Leibnitz, before the book had vet appeared in Germany, and the narrator stated that all was founded on a literal acceptance of the old scholastic law. Nihil in intellectu quod non prius in sensu, the great German replied, Etiam, nisi intellectus ipse. These words contain the key to the whole discussion. four words disclose, like the spear of another Ithuriel, the sophism of the whole Sensualistic system. In attempting to enumerate the affections of the mind, it overlooked the mind itself. At the first fair attempt to repair this omission, the whole system collapses. It had proposed to analyze all mental states into sensation. Well, the soul cannot have a consciousness of a sensation without necessarily developing the idea of conscious self, over against that of the sensuous object. "As soon as the human being says to itself, 'I,' the numan being affirms its own existence, and distinguishes itself from that external world whence it derives impressions of which it is not the author. primary fact are revealed the two primary objects of human knowledge; on the one side, the human being itself, the individual person that feels and perceives himself; on the other side, the external world that is felt and perceived; the subject and the object." science may not consistently omit or overlook the first of these, we have proved absolutely by this simple remark, that our self-consciousness presents the subject, self, to us in every perception of the external world, as distinct from the object; presents it even more immediately than the external object, the perception of which it mediates to us. We must first be conscious of self, in order to perceive the not-self. Whatever certainty we may have that the latter is a real object of knowledge, we must, therefore, have a certainty even more intimate that the former is also real. Why, then, shall it be the only substance, the only real existence in nature, to be ostracised from true science? This is absurd. Is it pleaded, with the Positivist, that its being and affections are not phenomena, not cognizable to the bodily senses? How shallow and pitiful is this, when these bodily senses themselves owe all their validity to this inward consciousness!

Let us now advance a step farther. As we have seen, every substance must have its attributes. The Ego is a real existence. If our cognitions have any regular method, then it must be by virtue of some primary principles of cognition which are subjective to the mind. While we claim no "innate ideas," yet it is evident that the intelligence has some innate norms, which determine the nature of its processes, whenever the objective world presents the occasion of them. deny this, we must not only believe the absurdity of regular series of effects without any regulative cause in their subject; but we must also deny totally the spontaneity of the mind. For what can be plainer than this: that if the mind has no such innate norms, then it is merely passive, operated on from without, but never an agent itself. Now, then, do not these innate norms of intelligence and feeling constitute primitive facts of mind? And to the Positivist, who professes to discard all psychology, I add: Are not these regular facts of the mind's constitution, proper objects of scientific observation? Is it not manifest that their earnest comprehension will give us the laws of our thinking, and feeling, and volition? Why have we not here a field of experimental science as legitimate as that material

world which is even less intimately and certainly known?

When we proceed to details, we find that the attempt to construct a system of cognitions, on any plan whatsoever, without à priori notions and judgments, is, in every instance, a self-contradiction. The mind derives all its ideas from sensation, exclaims the Sensualistic philosopher. No; for here is one judgment with which it must begin; namely, that sense-perceptions are valid! Here is one axiomatic truth which they assume. This. surely, is not a derived truth. From what can it be derived, without traveling in a vicious circle? Again: the Positivist exclaims, "The fundamental character of the positive philosophy is, that it regards all phenomena as subjected to invariable natural laws." Must not the principle which is "fundamental" to a philosophy be a primitive judgment? The foundation is that which is at the bottom, with no other part of the building beneath it. Again: How can this principle be learned empirically concerning "all phenomena?" Has any positive philosopher observed them all? Then he would be omniscient and ubiquitous. But a mere inference from partial observations can never give us universal, and much less, necessary truth! If this fundamental law of Positivism is known at all, it is only known as a necessary and primitive judgment.

So, when we examine the pretended analyses by which our original abstract notions are attempted to be reduced to inferences from sensations, we find them all deceptive. The Sensualist would have us infer our identity from the comparison of a second state of consciousness, induced by sensation, with a first. But how can comparison take place validly, unless the identity of the intelligence that looks first at one and then at the other of the objects compared be assumed beforehand? This may be illustrated in a very palpable way. Two children, in different rooms, begin to dispute concerning

the beauty of their toys or size of their apples. Each claims that his is the largest and finest. But, as long as they remain apart, and the two apples are subjected to the inspection of different pairs of eyes, the dispute is endless and aimless. Let them come into the same room, and let one child look at both apples; then a decision is possible. Let the Sensualist attempt to state in words this process of inference along which, he supposes, the mind passes to the conviction of its identity. "It infers that the second sensation is the sensation of the same mind that was conscious of the first." But as soon as the word "same mind" was conceived, the full notion of identity was already formed, and it was there in advance of all inference. In a word, no logical process can account for our belief of our own identity. because it must be assumed as unquestionable, in order to any logical process whatsoever. For, unless the reasoning agent is already certain that the intelligence which views the second premise is the same which views the first, it is impossible that it can know whether any valid relation exists between the two. We are thus taught that, instead of getting the knowledge of our identity as the result of any process of mind, it must be an à priori knowledge implied in every other process.

Many are the modes in which different Sensualistic philosophers account for the derivation of our notion of abstract space from sensations. The man of common sense can infer that they have an arduous task from the simple fact, which none can deny, that empty space is neither seen, heard, touched, tasted, nor smelled. These senses only tell us of bodies which are in space. Locke would have us infer the notion from the comparison of two bodies seen separated in space. James Mill and his followers would derive it from a "muscular sense," recognizing the absence of resistance, so that space is but our sense-perception of the extended not resisting.

Dr. Thomas Brown would resolve it into a form of our notion of succession, given us by the "muscular sense," during the progressive contraction of some set of muscles. But all the plans have this common vice, that the notion of abstract space has to be assumed at the beginning, in order to carry on the genesis of it. Thus, when Locke compared two bodies as separated, he must have had the notion of space already in his mind, in order to represent to himself the word "separated." This is too plain for dispute. It is as impossible for the mind to conceive a body, without positing it in space, as it is to conceive an attribute without referring it to a being or entity. Our abstract notion of space is the mental locus, which must be given by the mind itself, in order to think the idea of body. Nor does the introduction of a "muscular sense" help the matter. According to its own advocates and patrons, such a sense simply perceives resistance. It could never give us. then, a direct perception of extension. On this scheme, just as much as on any other, the latter notion must be furnished by the reason, and it must be in order to the mind's construing its abstract idea of extension empty of resistance. Were Dr. Thomas Brown's method valid, it would but resolve the notion of space into another form of our notion of successive time, and this we shall show to be underived.

Our notion of successive duration is accounted for by the Sensualistic system as derived by inference from our observation of a sequence in our states of consciousness. The ingenious illustration of this analysis has been mentioned in a previous place. But I now ask: What is involved in the word "successive"? When the mind notes the second consciousness, why is it that she infallibly puts it in a sequence after the first? Why is it that we find it impossible ever to place it abreast of the other and omit the notion of sequence? We do have coëxistent consciousnesses, or, at least, what appear

such. Our neighbor tells us of a thunder-storm in such immediate proximity, "that the lightning's flash and the burst of the thunder came precisely together." Now, why is it that it is impossible for this person to think the second flash and thunder-clap, a moment after. coëxistent with the first? How is it that we never get these sensations mixed at the time, and never confuse the order, no matter how small the appreciable interval? Obviously because the order of succession is given in the constitutive law of our perceptions. are conscious of sensations in succession. when you have said "succession," you have already formed the notion of time; the abstract notion of time is essential as the preëxisting form upon which to construe your ideas of successive impressions. The notion of time is in order to the perception of succession: the other scheme puts the effect before the cause.

We thus find that the postulate made in the previous chapter is true. The reason can only cognize body by putting it in space; and event, by putting it in time. And the source of these notions is from the reason itself, acting or performing the *genesis* of the notions first, when body or event is given us in perception. Perception, then, is the first occasion, but not the cause, of the notions.

In the brief review of "Positivism," we found it essentially a phase of the Sensualistic philosophy, differing from the other phases, in fact, in no distinctive principle, but only in its bold consistency and in certain absurd, but non-essential, excrescences of its founder's imagination. We have now reached the stage, in this discussion, of the genesis of our primitive notions and judgments at which we can expose the capital error of "Positivism," and also of the other Sensualists. According to M. Comte, Mathematics, the science of quantity, is the most positive, and, therefore, the most perfect of all sciences, and the basis of the whole struc-

ture of the "Positive Philosophy." Now, when we advert to this science, we see at once that it deals, not with visible and tangible magnitudes and quantities, but with abstract ones. The point, the line, the polygon, the curve, of the geometrician, are not those which any human hand ever drew with pen, pencil, or chalkline, or which human eve ever saw. The mathematical point is absolutely without length, breadth, or thickness: the line absolutely without thickness or breadth; the surface absolutely without thickness! How impotent is it for M. Comte to attempt covering up this crushing fact by talking of the phenomena of Mathematics! In his sense of the word phenomena, the science has none. The intelligent geometrician knows that, though he may draw the diagram of his polygon or his curve with the point of a diamond upon the most polished plane of metal which the mechanic arts can give him. yet it is not exactly that absolute polygon or curve of which he is reasoning. How, then, can he know that the conclusions he predicates, by the aid of the senses, of this imperfect type, are exactly true of the perfect ideal of the figures? He knows that the true answer is this: abstract reasoning assures him that the small difference between the imperfect, visible diagram and the ideal, absolute figure, is one which does not introduce any element of error, when the argument is applied to the ideal. But, on the contrary, the reason sees that the more the imperfection of the diagram is abstracted, the more does the argument approximate exact truth. Now, I ask: How does the mind pass from the phenomenal diagram to the conceptual? from the imperfect to the perfect idea? Neither Positivism nor Sensualism has any answer. So, the notions of time, space, ratio, velocity, momentum, substance, upon which the higher calculus reasons, are also abstract. Positivism would make all human knowledge consist of that of phenomena and their laws. Well, what is a

"law of nature?" It is not itself a phenomenon; it is a general notion which, in order to be truly general, must be wholly abstract. How short-sighted is that observation which leaves out the more essential elements of its own avowed process! These instances, to which others might be added, show that the admission of something à priori is necessary to the construction of even the most phenomenal knowledge.

The capital error of Positivism and all other forms of Sensualism appears, again, in denying the prior validity of our axiomatic beliefs, or primitive judgments, and in representing them as only empirical conclusions. That psychology and logic of common sense, in which every man believes, and on which every one acts, without troubling himself to give it a technical statement, holds that, to conclude requires premises to conclude from; and that the validity of the conclusion cannot be above that of these premises. Every man's commonsense tells him that a process of reasoning must have a starting point. The chain which is so fastened as to sustain any weight, or even sustain itself, must have its first point of support at the top. That which depends must depend on something not dependent. But why multiply words upon this truth, which every rational system of mental science has adopted as its alphabet? It can scarcely be more happily expressed than in the words of a countryman of Comte, M. Royer Collard: "Did not reasoning rest upon principles anterior to the reason, analysis would be without end, and synthesis without commencement." These primitive judgments of the reason cannot be conclusions from observation: for the simple cause, that they must be in the mind in order to the making of any conclusions. Here is a radical fact, which explodes the whole Sensualistic scheme, in all its forms.

Its advocates cannot but see this; and hence they labor with many contortions, to make it appear that

these primitive judgments are, nevertheless, empirical conclusions. Comte's expedient is the following: Savs he: "If, on the one side, every positive theory must be necessarily founded upon observation, it is, on the other side, equally plain that to apply itself to the task of observation, our mind has need of some theory. If in contemplating the phenomena, we do not immediately attach them to certain principles, not only would it be impossible for us to combine those isolated observations. so as to draw any fruit therefrom; but we should be entirely incapable of retaining them, and in most cases, the facts would remain before our eyes unnoticed. The need at all times of some theory whereby to associate facts, combined with the evident impossibility of the human mind's forming, at its origin, theories out of observations, is a fact which it is impossible to ignore." He then proceeds to explain, that the mind, perceiving the necessity of some previous "theories," in order to associate its own observations, invents them, in the form of theological conceptions. Having begun, by means of these, to observe, generalize, and ascertain positive truths, it ends by adopting the latter, which are solid, and repudiating the former, which its developed intelligence has now taught it to regard as unsubstantial. His idea of the progress of science, then, seems to be this: the mind employs these assumed "theories," to climb out of the mire to the top of the solid rock, as one employs a ladder; and having gained its firm footing, it kicks them away! But what if it should turn out, that this means of ascent, instead of being only the ladder, is the sole pillar also of its knowledge? When it is kicked away, down tumbles the whole superstructure, with its architect in its ruins. And the latter is the truth. For if these theories are prior to our observation, and are also erroneous, then all which proceeded upon their assumed validity is as baseless as they. It is amusing to notice the simple art with which

Comte seeks to vail this damning chasm in his system, by calling these baseless first assumptions "theories." They are, according to his conception, manifestly nothing but hypotheses. Why did he not call them so? Because then, the glaring solecism would have been announced, of proposing to construct our whole system of demonstrated convictions upon a basis of mere hypothesis. Nobody would have been deceived. Nor does the subterfuge of J. S. Mill avail any better: it is, indeed, substantially the same with Comte's. (And this identity in the capital point shows that Mill is, in substance, a Positivist, notwithstanding his disclaimer of the worse extravagances of the system.) His plan is this: That as the sound physicist propounds a hypothesis, which at first is only probable, not to be now accepted as a part of science, but as a temporary help for preparing the materials of an induction; and as this induction not seldom ends by proving that this hypothesis, which was at first only a probable guess, was indeed the happy guess, and does contain the true law; so, the whole of our empirical knowledge may be constructed by the parallel process. In other words, the pretension of Mill is, in substance, that all our primitive judgments are at first only the mind's hypothetical guesses; and that it is empirical reasoning constructed upon them afterwards, which converts them into universal truths. The simple, but thorough answer is: That this proving or testing process, by which we ascertain whether our hypothesis is a truth, always implies some principle to be the criterion. How, we pray, was the test applied to the first hypothesis of the series, when, as yet, there was no ascertained principle to apply, but only hypothesis? Quid rides? Mr. Mill's process must ever be precisely that of the man who attempts to hang a chain upon nothing! No; the hypothetic ladder is not the foundation of our scientific knowledge. Grant us a solid foundation, and a solid

structure building upon it; the ladder of hypothesis may assist us in carrying up the materials out of which we carry the building still higher; that is all. But the parts which we add of the materials carried up by the ladder, rest at last, not on the ladder, but on the foundation.

The accepted tests of a primitive intuition are three: That it shall be a first truth: i. e. not learned from any prior premises; That it shall be necessary, i. e. immediately seen to be such, that it not only is true, but must be true: And that it shall be universal, true of every particular case everywhere and always. Hence, these first truths are inevitably believed by all sane men. whenever their attention is called to them in terms which they understand. The Sensualistic school seems to admit, by the character of the objections, that if the mind have principles which do fairly meet these three tests, then they will be proved really intuitive. But they object, those beliefs do not meet the first test, for they are experimentally learned by every man; in the course of his own observation, like all inductive truths. And here they advance the plea of their amiable leader. Locke: that there are sundry axioms, whose formal announcement in words to inexperienced minds, instead of securing their immediate assent, would evoke only a vacant stare. We have to present experimental instances of the truth, in concrete cases, before we gain their intelligent assent. Does not this prove that the truth is learned experimentally?

But why is the experimental instance the occasion of this mind's seeing the necessary truth? It is only because the concrete case is the means which enables him to apprehend the real meaning of your abstract enunciation. This his mind had not hitherto grasped, by reason either of inattention, indifference, or the lack of familiarity with general and philosophic terms. How vain is the argument, that, because this mind did not see a given truth while as yet the verbal medium of intellection was darkness, therefore such truth cannot be the object of direct mental vision? Because my child is not willing to affirm which of two "pigs in a poke" is the bigger, it shall be decided forsooth, that the child is blind, or that pigs are not visible beings?

Now, against this idleness of talk, we demonstrate. by proof as empirical and "positive" as that of the Positivist for any law of physics, that the observation of the experimental cases is not, and cannot be the cause of the intuitive conviction: it is only the occasion. Let us grant just such a case as Locke claims against us: We meet an ignorant, heedless, sleepy servant, and we ask: My Boy, if two magnitudes be equal each to a third magnitude, must they be equal to each other? He will probably answer only by a vacant look, or a profession of total ignorance about it. Our words are not in his ordinary vocabulary; the idea is out of his ordinary range of reflection, though he has in fact often acted upon it; as in cutting four sticks for his partridge-trap, by one measure, when he designed them to be all equal. We tell him then, to fetch three twigs from the hedge, and we will explain. Name them by numbers 1, 2, 3. Tell him to take his pocket-knife and cut No. 1 and No. 2 of equal length; and then lay No. I on yonder stone. Then let him cut No. 3 equal to No. 2. Ask him then: "Now, Boy, consider: if you should bring No. 1 from the stone yonder, and measure it against No. 3, do you think you would find them equal in length?" If you have succeeded in getting his real attention, he will reply confidently: "Yes, Sir, they will be found equal." "Are you certain of it?" "Yes, Sir, perfectly certain." "Had you not better fetch No. 1, and try them together, before you decide?" "No, Sir: it is unnecessary." "Why are you so certain?" "Why, Sir: did I not cut No. 1, and No. 3. both by No. 2? They must be equal: it cannot be

otherwise." Let the student notice here, that there has been no experimental trial of the equality of the first and third twigs in length: hence it is simply impossible that the servant's confidence can result from experiment. It is the immediate intuition of his reason, because there is, absolutely, no other source for it. Obviously, therefore, the only real use for the knife and the three twigs was to illustrate the terms of the proposition to the ignorant apprehension of the boy. Notice also, that now he has gotten the idea, he is just as confident of the truth of the axiom, concerning all possible quantities of which he has conception, as though he had tested it on all by experiment. This suggests the further argument, that our intuitive convictions cannot be from experiment, because, as we shall see, we all hold them for universal truths: but each man's experience is limited. The first time a child ever divides an apple, and sees that either part is smaller than the whole, he is as certain that the same thing will be true of all possible bodies, as well as of apples, as though he had spent ages in dividing apples, peaches, melons, sweetmeats, acorns, and everything that came to his hand. Now, how can a universal truth flow experimentally from a single case? Were this the source of belief, the greatest multitude of experiments which could be made in a life-time, could never be enough to demonstrate the rule, for the number of possible cases still untried would yet be infinitely greater. Experience of the past, by itself, does not determine the future.

Moreover, sundry intuitive truths are incapable of being experimentally inferred, because the cases can never be brought under the purview of the senses. "Divergent straight lines," we are sure, "will never enclose any space, though infinitely produced." Now, who has ever inspected an infinite straight line with his eyes? The escape from this refutation laboriously at-

tempted by J. S. Mill is this: One forms a mental diagram of that part of the divergent pair of lines which lies beyond his ocular inspection (beyond the edge of the largest actual sheet of paper, or board, or other surface, on which he has drawn lines), and by the mental inspection of this part, he satisfies himself that they do not meet. And this mental inspection of the conceptual diagram is, says he, as properly experimental as though it were made on a material surface. On this queer subterfuge we might remark, that it is more refreshing to us, than consistent for them, to find Sensualists or Positivists admitting that the abstract ideas of the mind can be subjects of experimental observation. We had been told all along, that science dealt only with ohenomena. It is also news to us, that Sensualism can consistently admit any power of conceiving infinite ideas in our minds. What are these but those naughty things, metaphysical notions, with which the intelligence cannot possibly have any business, because they are not given to it in sensation? But, chiefly, Mill's evasion is worthless in the presence of this question: How do we know that the straight lines in the conceptual and infinite part of this imaginary diagram, will have the identical property possessed by the visible parts on the black-board? What guides and compels the intelligence to this notion? Not sense, surely; for it is the part of the conceptual diagram which no eye will ever see. It is just the reason's own à priori and intuitive power. Deny this, as Mill does, and the belief, which all know to be solid, becomes baseless.

In a word, this question betrays how inconsistent the Sensualist is, in attempting to derive first truths from sensational experience, and ignoring the primitive judgments of the reason. How has he learned that sensational experience is itself true? Only by a primitive judgment of the reason! Here, then, is one first belief which sense cannot have taught us, to wit: that

what sense shows us is true. So impossible is it to construct any system of cognitions, while denying to the reason all primary power of judgment.

When we propose the second test: that intuitive judgments are always necessary, the inquiry is embarrassed by raising the question, What is meant by "a necessary truth?" One answers (with Whewell, for instance), that it is a truth the denial of which involves a contradiction. It is, of course, easy for Mill to reply to this heedless definition that, then, every truth may claim to be an intuition; for is not contradiction of some truth the very character of all error? If one should deny that the two angles at the base of an isosceles triangle are equal, he could soon be taught that this denial contradicted an admitted property of triangles. (And this, indeed, is one usual way by which we establish deduced truths.) I affirm, then, the definition of common sense; that a necessary truth is one the denial of which is immediately self-contradictory. Not only would the denial clash with other truths and other axioms, but it would contradict something in the terms of the case itself, and this, according to the immediate, intuitive view which the mind has. Does not every one know that his mind has such judgments, necessary in this sense? When he says: "The whole must be greater than either of its parts," his mind sees intuitively and unavoidably, that the assertion of the contrary would contradict the very term "parts," as belonging to the case. Who does not see that this maxim is inevitable to the reason in a different sense from the two following statements: "The natives of England are white; those of Guinea, black." These two are just as true as the axiom; but not in the same sense necessary.

Or, if Whewell answers the question, "What is necessary truth?" it is a proposition the falsehood of which is "inconceivable." Mill replies, that this is no

test of the primariness of truth; no test of truth at all; because our capacity of conceiving things to be possible or not depends, notoriously, upon our mental habits, associations, and acquirements. He points to the fact. that all Cartesians, and even Leibnitz, objected against Sir Isaac Newton's theory of gravitation and orbitual motion, when first propounded, that it was "inconceivable" how a body propelled by its own momentum, should fail to move on a tangent, unless connected with the centre of motion by some substantial bond. There is a truth in this and similar historical facts. It is, that the antecedent probability of the truth of a statement to our minds, depends very greatly upon our habits of thought. And the practical lesson it should teach us is moderation in dogmatizing, and candor in investigating. But, for all this, the evasion will be found a verbal quibble, substituting another meaning for the word "inconceivable." We do not call a truth necestary because, negatively, we lack the capacity to conceive the actual opposite thereof; but because, positively, we are able to see that the denial of the truth involves a self-evident and immediate contradiction. It is not that we cannot conceive how the opposite comes to be true, but that we can see it is impossible the opposite should come to be true. And this is wholly another thing. The fact that some truths are necessary in this self-evident light, every fair mind reads in its own consciousness.

When we come to the third test of first truths, that they are universal, the Sensualists ring many changes on the assertion, that there is debate which are first truths; that some propositions long held to be such, are now found to be not axiomatic, and not even true, such as these: "Preëxistent material is as necessary to the creative act as a Creator." "Nature abhors a vacuum." "A material body cannot directly act save where it is present." The answer is, that all this proves,

not that the human mind is no instrument for the intuition of truth, but that it is an imperfect one. same line of objection would prove with equal fairness (or unfairness), that empirical truths have no inferential validity: for the disputes and errors here have been a thousand fold wider. Man often thinks incautiously: he is partially blinded by prejudice, habit, association, hypothesis, so that he has blundered a few times as to first truths, and is constantly blundering myriads of times as to derived truths, in which the terms of the cognition are more numerous and intricate. then? Shall we conclude that he has no real intuition of first truths? Then by this conclusion we compel ourselves to admit, by proof reinforced a thousand fold, that still less has he any means, intuitive or empirical, for ascertaining derived truths. This is blank scepticism. It finds its practical refutation in the fact that, amidst all his blindness, man does ascertain many truths, the benefits of which we actually possess. No. The conclusion of common sense is, that we should take care when we think. But the fact remains, that there are axiomatic truths which no sane man disputes, or can dispute: which command universal and immediate credence, when intelligently inspected; which we see must be true in all possible cases which come within their terms. For instance: every sane human being sees, by the first intelligent look of his mind, that any whole must be greater than one of its own parts; and this must be true of all possible wholes in the universe, which, in any form whatsoever, come within the category of quantity. Is it not just the fact that man is a reasonable creature, which makes the proposition universal? One man can reason with another man, and convince him. There is some uniformity among the conclusions of all different minds, just as there is among their sense-perceptions. In neither case is it perfect. Some men are affected with color-blindness, and call

that blue which I call green. But yet, when I see a larger horse beside a smaller horse. I also ascertain that my neighbor thinks the same horse larger which I think the larger; and that he never sees that to be an ox which I see to be a horse. In like manner, I find that the chain of propositions which convinced me that the sum of the three angles in every triangle is equal to two right angles, also convinces all other people, who attend to them and understand the terms. Here, now, is a great class of facts of observation. There must be a ground for the uniformity, else the uniformity would not be. That cause of uniformity, again, must be in human minds: because it is there we find the results. What is it except universal à priori laws of the reason? is too plain to need elaboration. It is just these innate, common, à priori, regulative laws of human thought, ensuring the rise, wherever the appropriate conditions exist, of the same primitive judgments in all minds; it is these alone which make communion of thought possible, which enable us to communicate truth from mind to mind; and which ground that (incomplete) harmony of human convictions, without which education, government, cooperation, law, and society itself, would be impossible.

An instructive proof of the error committed by Sensualism, in denying à priori judgments to the reason, is found in the perplexity to which it is reduced, in attempting to explain the logical force of the syllogism. Let us see how three of the ablest and least extreme of Sensualists flounder in this slough of self-contradictions: Locke, Dr. Thomas Brown, and J. S. Mill. They all substantially agree in asserting that every regular syllogism is a petitio principii. Does not every follower of Aristotle, say they: tell us, that if anything is contained in the conclusion which is not found in the premises, the syllogism is vicious? Then, the mind must have known the conclusion in order to be author-

ized to enounce the major premise (which is the inclusive one). Hence, they urge, either the regular syllogism leads to nothing, and is worthless, or it begs the question. They are fond of taking such instances as this: "All men are mortal. Socrates is a man. Therefore Socrates is mortal." Now say they: unless it has been ascertained that Socrates is mortal, the assertion that all men are mortal, is unwarrantable. But when once it has been ascertained that Socrates is mortal, we need no syllogism to prove it over again: the pretended logical process is either utterly superfluous, or it is a petitio principii. Thus stands one side of the puzzle.

But, on the other side, nobody can succeed in showing any other valid way of inferential reasoning. From Aristotle down to our day, the vast majority of thinking men have been convinced, that the syllogism does contain the correct account of our inferential processes. Are they all mistaken? Mill himself (Logic, Bk. II., Chap. 2) says: "All valid ratiocination . . . may be exhibited in some of the above forms. The whole of Euclid, for example, might be thrown without difficulty into a series of syllogisms regular in mode and figure." "All correct ratiocination admits of being stated in syllogisms of the first figure alone." Locke and Brown, following him, propose, that after throwing away the syllogism as worthless, we shall depend upon the enthymeme (or sorites), as containing the whole account of valid inferential processes. But it is the easiest of victories to show, that the enthy meme is only valid, because it contains a tacit reference to the sanction of a major premise, which is not stated. and yet is assumed. We have only to put the question: why does this conclusion in this enthymeme follow from this minor premise, in order to compel a recurrence to the assumed major? Let us take the simple and homely instance already described: the ignorant

servant who had never consciously stated to himself in scientific form, the axiom that magnitudes, which are equal to a third, must be equal to each other. He is about to construct a trap for partridges; and he tells us that his purpose is to make it four-square, with equal sides. Watch him. He cuts four laths, using the first alone as a measure of length for the other three, and proceeds with confidence to begin his construction. We will stop him, and ask: Did you not design the four sides to be of equal length? Are you certain that each of those laths is equal to each of the others? You have not measured them all: He will perhaps pause a moment to reflect; but he will answer with confidence: "I measured each of them by the same." Thus he shows that the axiom, though not consciously shaped in words to his own attention before, was yet the real basis of his confidence. Let us, again, take Locke's own instance, from his 4th Book, Sec. 10, where, disdainfully discarding the syllogism, he asserts that the enthymeme is the sufficient account of our reasonings. "A just God will punish men for their evil works: Therefore men have free choice." Why does this conclusion: that men have free choice, flow from the fact, that a just God will punish their sins? Only because it is assumed that we are, of course, agreed upon another judgment; namely: that freedom is essential to responsibility. Unless that is virtually in the mind, the conclusion is not seen as certainly true. So that after all, the full statement of the illation must take this form.

Freedom in the agent is necessary to a just responsibility.

God (who is just) will hold men responsible.

Therefore men are free agents.

No better proof need be desired than we find from Locke's own instance.

Mill, after conceding that every regular syllogism is a begging of the question, endeavors to solve his own inconsistency, and to explain the nature of logical inference, by saying that we do not conclude from a major premise, but according to a major premise: which is a mere convenience, of the nature of a formula, for recording our own particular observations in classes. He declares, that all reasoning is "from particulars to particulars." Let us hear his own example: The Aristotlean would infer, as to the Duke of Wellington, [who was alive when Mill wrote]: "All men are mortal: The Duke is a man: Therefore the Duke will prove mortal."

Now, says Mill, the Duke's mortality is not an inference from the universal proposition, that all men are mortal; because his mortality must first be settled before that proposition is proved to be universal. All that we have to infer from, is the particular instances in which we have found John, Thomas, and other men mortal. Our reasoning is from particulars to particulars: and if we ever bring in the major premise, the general proposition, it is merely for convenience of referring to the result of our own particular experiences. But this is almost transparently erroneous. We are not entitled to conclude certainly from particulars to another particular. Sometimes we may: oftentimes we may not. How shall we know when we may, and when we may not? Only the major premise can answer this question. Thus: let us suppose a common Englishman arguing: John, Thomas, and all the men I have seen die, died worth less than twenty thousand pounds: Therefore the Duke of Wellington will die worth less than that sum. Or this: John, Thomas, and all the men I know, died under eighty years of age: Therefore the Duke must die under eighty years of age.

These inferences of particulars from particulars are precisely as regular in form as Mills'; yet no Englishman is foolish enough to reason from his particular experiences thus. Why? Because, notwithstanding his

own personal experiences, he knows that there is no universal, necessary ground, limiting all men's fortunes to twenty thousand pounds, and their years to eighty. The major premise is lacking. Thus, Mills' solution fails.

Here, then, is the inextricable difficulty in which these Sensualistic philosophers have involved themselves; they prove that, regarding all general truths as mere truths of observation, the syllogism is nothing but a petitio principii. It is proved, on the other hand, that the syllogism is the only valid form of illation. Has man, then, no real reasoning powers? The true solution is one of which the radical error of Sensualism has deprived them. Notice, in the first place, that the major premise in the trite example, "All men are mortal," etc., is a proposition expressing only an analytic judgment. Mortality is but one of the attributes which we have agreed to combine in the general term, man. When we affirm mortality of man, we only affirm that it is one of the attributes the term man connotes. It is perfectly true, that a combination of another particular premise (Socrates is a man) with such a merely analytic judgment, can never give us a real extension of our knowledge: it can do no more than expound to uswhat was implicit in our own general proposition. Hence the whole plausibility of the cavils against syllogisms. Farther: were that true which Sensualism asserts, that the mind has no àpriori judgments of necessary truth: and that it has no other way to construct general propositions than the experiential, by colligating particular experiences: then it would be perfectly true that the syllogism would be a petitio principii. The argument of Locke, Brown, and Mill on this point would be unanswerable. If I had no way to reach the universal proposition, "All men are mortal," than by observing the death of each and every man; then it is perfectly true that I must be certain Socrates is mortal,

before I am certain that "All men are mortal." [And another thing would be equally true: that I should never get any solid universal truths at all, without being omniscient and ubiquitous, by pursuing this method. And this is the same thing as to say that, on this method, the finite mind of man never could have any certain knowledge of general truths.] Here the Sensualist is left in the slough of his hopeless difficulty.

But the true solution is in the fact that Sensualism is false: that man has another way of knowing necessary truths, than empirical observation; and that thus he has other than mere analytic judgments. To use the language of Kant, who has expressed this fundamental truth more clearly than any philosopher, the reason also has its synthetic judgments à priori. It cognizes necessary universal truths, in advance of observation of instances coming under them. It is these à priori judgments that become the major premises of syllogisms which lead us, by illation, to conclusions that are a real extension of our knowledge, without a petitio principii. To state this all-important truth in other terms: Grant us necessary à priori judgments of the reason, and we can comply with the just rule, that the conclusion shall contain nothing except what is included in the premises, and yet the conclusion shall be a real advancement of our knowledge. Deny us those à priori judgments, and we cannot. An illustration will make this plain; and I desire none better than the one I have already borrowed from Locke, to use against him. He wished us to infer, by a naked enthymeme, that because a just God will punish men's sins, therefore they are free. We admitted the conclusion; but we found. on inspection, that it was only valid by virtue of a tacit reference to another proposition: this, namely, that freedom is essential to a just responsibility. This last is, in fact, the major premise. But how are we certain of it? Not by observation: not by experience; it is

an à priori moral judgment of the reason; in other words, an intuition of conscience. It is for this reason that we have, in this instance, not only the form or shell of a syllogism, but a real synthesis of truth to truth, and a real extension of conviction in the conclusion. It is because the mind has à priori judgments that it can reason fruitfully. In saying this, all utility is not denied to the other, the fruitless kind of syllogism. It is often useful to the mind, to reassure and correct itself, by thus analyzing the contents of its own general propositions. Even the old threadbare instance: "All men are mortal: A is a man: therefore, etc.." might have its actual utility. When the ferocious Cortez was storming the city of Mexico, the Aztecs were almost paralyzed, in their resistance, by the supposition that their assailant was immortal and invulnerable. (They did not understand the secret of plate armor.) Suppose, now, that this superstition was about to discourage all effort; that they were about to conclude it was useless to bend a bow or thrust a spear against him, because he could not be killed? It might. then, be very practically useful to them to reassure themselves by remembering that he was a man, and, therefore, mortal; so that it was not impossible, if difficult, by a courageous defence of their homes, to destrov the wicked assailant.

But be it understood that we do not limit the value of deductive reasonings to this low grade. It is an organ for the positive extension of man's knowledge; but it is such only on condition we grant to the mind some synthetic à priori judgments to begin with, and to combine with truths of mere observation. Our point, then, is this: that the fundamental error of the Sensualistic philosophy leaves its advocates between the horns of a dilemma. Assert that we have no cognitions, except the experiential, by the senses: and the demonstration of the Sensualists against the syllogism

is valid; it is a begging of the question. Yet there is no other explanation; than the syllogistic, of the validity of our inferences! Either, then, Sensualism is erroneous, or it is impossible for man to learn anything new by inference.

The most mischievous assertion of Sensualism against our intuitive judgments is the denial to the mind of any immediate à priori cognition of causation and power. This, then, is the vital head of our debate. The correct doctrine here is, that when we see an effect, we intuitively refer it to a cause, as that which produces its occurrence. And this cause is necessarily conceived as having a power to produce it under the circumstances. For it is impossible for the reason to think that nothing can evolve something. Nothing results only in nothing. But the effect could not have produced its own occurrence, for this would imply that it acted before it existed. Hence, also, the reason makes this inevitable first inference, that the power of that cause will produce the same effect which we saw, if all the circumstances are the same. But Sensualism asserts that the mind is entitled to predicate no tie between cause and effect, save immediate, invariable antecedence and sequence as observed, because this is all the senses observe, and "Nihil in intellectu quod non prius in sensu." The inference that the like cause will in future be followed by the like effect, is, according to them, an empirical result only from repeated observations, to which the mind is led by habit and association.

Now, my first remark is, that only Sensualism could be guilty of arguing that there can be no real tie of causation, because all that the senses see is an immediate sequence. The absurdity (and the intended drift also) of such arguing appears thus: that by the same notable sophism there is no soul, no God, no abstract truth, no substance, even in matter, but only a bundle

of properties. For did our senses ever see any of these? How often must one repeat the obvious fact, that if there is such a thing as mind, it also has its own properties; it also is capable of being a cause; it also can produce cognitions according to the law of its nature, when sense furnishes the occasion? Sensation informs us of the presence of the effect: the reason, according to its own imperative law, cognizes power in the cause.

It is extremely easy to demonstrate, and that by a "positive method," that this notion of causation cannot be accounted for merely as a case of "inseparable association." Mental association of a pair of phenomena is not the source, but the consequence of the notion. We all see certain "immediate, invariable sequences" recurring before us with perfect uniformity, yet we never dream of imputing a causative tie. We see other sequences twice or thrice, and we are certain the tie of power is there. Light, for instance, has followed darkness, just as regularly as light has followed the approach of the sun. Nobody dreams that darkness causes light: everybody is convinced that the sun does cause it. It-thus appears, experimentally, that association has not taught us the notion of cause; but that our knowledge of cause corrects our associations, and controls their formation.

Every effect is a change. It is familiar to the common sense of every one that many changes result necessarily from their antecedents. For instance, all division of magnitudes results inevitably in the diminution of the parts, as compared with the whole. It is impossible that any part can remain undiminished. Or, again, motion of one or two bodies at rest necessarily changes the distance between them. It is impossible that the first antecedent shall be, and the second change not result. It is unnecessary to multiply instances. But can it be said that in these sequences there is no

cause; no power? Is not this a contradiction? Surely that which necessitates change is efficient cause.

The subtile and vet simple reasoning by which Kant's "Critic of the Pure Reason" (Bk. II. Ch. 2, § 3) shows the incorrectness of resolving cause and effect into mere sequence, is worthy of your attention here. cites two instances: In one, I look successively at the two parts of a large house over the way. I perceive, for instance, first its front, and then its end. The perceptions, then, are, in my consciousness, a sequence. But do I ever think for a moment, although the thing may have occurred invariably in this sequence, for ever so many times, that the being of the end is consequent upon the being of the front? Never. I know they are simultaneous. In another case, I see a vessel in the river just opposite to me; and next, I see it below me. The perceptions are not more successive than those of the two faces of the house. But can I ever think that the two positions of the vessel are coëtaneous? No. But why? The only answer is, that the reason has, by its intuition, seen effect and dependency in the last pair of successive perceptions, which were not in the first pair. The vessel has moved; the change of position is an effect of this antecedent. The other instance is drawn from those numerous causative sequences in which no interval of time is appreciable by the senses. The cause A and the effect B come together. Why is it that the mind always refuses to think the matter so as to have B lead A, and will only think that A leads B? Why cannot you think that the sound of the blow caused the impact of the hammer, instead of thinking that the impact caused the sound? Why do not people think differently about this? Surely there is a law of the reason regulating this: and the mind sees that the something which determines the order of the sequence between the two simultaneous perceptions, is the cognition of power.

Men are, in a multitude of cases, convinced that they have found an invariable law of cause by which they can know that a certain consequent will always follow a certain set of antecedents. What else is practical science? But this certainty could never be established by the mere experience of the sequence, however often. The mere empirical induction only gives a probability. Were there no à priori law of the reason to guide us, the experience of the past would only demonstrate the past: there would be no logical tie authorizing us to project our expectation upon the future. We ask our opponents, if it be the experience of numerous instances, which gives us certainty of a future recurrence, how many instances will effect the demonstration? Is their answer, for instance, that one hundred uniform instances, and no fewer, will be sufficient? What, then, is the difference between the ninety-ninth and the hundredth? According to the supposition, these two instances must be exactly alike; if they were not, the unlike one could certainly contribute nothing to the proof, for it would be exceptional. Why is it, then, that the ninety-nine do not prove a law of cause, while the hundredth instance, exactly similar to all the rest, does? There is no tenable answer. The truth is, the reason why a merely empirical induction suggests even a probability that a certain oft-repeated sequence contains a true law of cause (which is all it can do), is this: Intuition has assured us that the sequent event must have some efficient cause, and the fact which experience notes, that the precedent observed phenomenon is its seeming next antecedent, indicates a presumption that this may be the true cause. For reason has taught us that the true cause must be the nearest antecedent, either visible or unnoticed. But there may be another still nearer antecedent not yet detected; and if it turns out that there is, this will have to be accepted instead of the other, as the true cause. We, therefore, resort to some test, grounded on the intuitive law of cause, to settle this doubt. Just so soon as that doubt is solved, if it be by one observation, the mind is satisfied; it has gotten the causative antecedent: it is now assured that this antecedent. if arising under the same conditions, will certainly produce this consequent, always and everywhere; and if this test be lacking, ten thousand uniform instances will generate no such certainty. Yea, there are cases. in which the conviction of causative connection is fully established by one trial, when the circumstances of that one trial are such as fully to assure the mind, that no other undetected antecedent can have intervened or accompanied the observed one. For instance, a traveler plucks and tastes a fruit of inviting color and odor, which was wholly unknown to him before. The result is a painful excoriation of his lips and palate. He remembers that he had not before taken into his mouth any substance whatever, save such as he knew to be innocuous. The singleness of the new antecedent enables him to decide that it must have been the true cause of his sufferings. That man thenceforward knows, just as certainly, that this fruit is noxious, whenever he sees it, to the thousandth instance, without ever tasting it a second time, as though he had tasted and suffered nine hundred and ninety-nine times. Indeed, as Dr. Chalmers has well shown, experience is so far from begetting this conviction of a law of cause, that its usual effect is to correct and limit it. 'A child strikes its spoon or knife upon the table for the first time; the result is sound, in which children so much delight. He next repeats the experiment confidently upon the sofa-cushion or carpet, but his confidence is mistaken; he is, perhaps, vexed at his failure to evoke any sound. Experience did not generate, but correct. his intuitive confidence that the same cause would produce the same effect; and this, not by refuting the principle, but by instructing him that he had mistaken the

true cause of sound. He now finds that this was not, as he supposed, mere impact, but a combination of this with the elasticity of the thing struck.

The truth, that no mere experience of a sequence is enough to authorize us in believing it an invariable law, was ingeniously illustrated by the "Calculating Machine" of Babbage. The machinery could be so adjusted that it would exhibit successively, through a hole in its dial plate, a series of numbers increasing by a given ratio. When this series had regularly continued until the spectator was wearied with watching it, and was ready to conclude that it expressed the unchanging law of the machine, it would change the ratio, without any new adjustment of the maker, and continue the new series. Now, if a regular empirical induction could demonstrate anything, it would have done it here; yet no sooner did the spectator conclude that he had thus found the law, than he was refuted.

I. S. Mill himself admits expressly what Bacon had taught us, that this induction by mere enumeration of instances (Inductio enumerationis simplicis) gives no demonstration of a causative tie. To reach the latter. we must apply some canon of induction, which will discriminate the propter hoc from the post hoc. Does not Mill himself propose such canons? It is obvious that the logic of common life, by which plain people convert the surmises of experience into available certainties, is but the application, by common sense, of the same canons. Let us now inspect an instance of such application, and we shall find that it proceeds at every step on the intuitive law of cause as its postulate. Each part of the reasoning which distinguishes between the seeming antecedent and the true cause, is a virtual syllogism, of which the intuitive truth is the major premise. Let us select a very simple case: the student will see, if he troubles himself to examine the other canons of induction, that they admit of precisely the

same analysis. We are searching for the true cause of an effect which we name D. We cannot march directly to it, as the traveler did in the case of the strange, poisonous fruit, because we cannot procure the occurrence of the change D with only a single antecedent. We must therefore, avail ourselves of the help of a canon of induction. First, we construct an experiment in which we contrive the certain exclusion of all antecedent ohenomena save two, which we will name A and It still remains doubtful which of these produced the effect D, or whether both combined to do it. contrive a second experiment, in which B is excluded. but another phenomenon, which we will call C, now accompanies A, and the effect D again follows. Now we can get the truth. Here are two instances. In the first, A and B occurred and D followed immediately. all other antecedents having been excluded. The inductive canon now proceeds, that therefore the cause of D is either A or B or the two combined. But why? Because the effect D must have had its immediate cause, which is our à priori, intuitive postulate. In the second instance, A and C occurred together, and D followed. Here, again, we know the true cause must be A or C, or the two combined. Why? For the same intuitive reason. But in the first instance, C could not have been the cause of D, because C was then absent: and in the second instance, B could not have been cause, for it was then absent. Therefore A was the true cause all the time. Why? Because we knew intuitively that every effect has its own cause. And now having ascertained that A was the true cause in the two instances, we are sure that if all other conditions remain the same, A will produce B in all the future: we have established a universal law of cause. Why is it that two instances thus verified, have done what a myriad of instances of mere sequences, however invariable, could never have done? That is to say, two

instances have grounded a true induction, which authorizes us to project our confident expectation over the whole future, and to predict infallibly what effect will follow this cause A. We have read one of the secrets of nature and of God. How? Only because we knew from the first, the universal law of the reason, that like causes must produce like effects.

It thus appears that the intuitive belief in this principle is essential, beforehand, to enable us to convert an experimental induction into a demonstrated general truth. Can any demonstration be clearer of the truth that the original principle itself cannot be the mere teaching of experience? It passes human wit to see how a logical process can prove its own premise, when the premise is what proves the process. Yet this absurdity Mill gravely attempts to explain. His solution is, that the law of cause, at first assumed by the mind only as a hypothesis from experimental indications, is found to be "an empirical law coëxtensive with all human experience." May we conclude, then, that a man is entitled to hold the law of cause as perfectly valid only after he has acquired "all human experience?" This question dissolves the sophism into thin air. It is experimentally proved that this is not the way in which the mind comes by the belief of this law, because no man, to the day of his death, ever acquires all human experience, but only a part, which, relatively to the whole, is exceedingly minute, and because every man believes the general law of cause when he begins to acquire experience. If he did not, he would never learn anything by his experience, which was a general truth. The just doctrine, therefore, is, that experienced instances are only the occasions upon which the mind's own intuitive power pronounces the self-evident law.

John Stuart Mill is of the Sensualistic school in his logic. He is the accepted philosopher of infidel.

Radicalism in this country and England. The student has, in the above specimens, a fair taste of his quality. With much learning and labor, he combines subtlety and dogmatism. His style, like his thoughts, includes the extremes of intricacy and perspicuity. He can be transparent or muddy, as suits his purpose. When one sees the confused and mazy involutions in which he entangles the plainest propositions that are unfriendly to his sensualistic principles, he is almost ready to suppose him the honest victim of these erroneous postulates, until he observes the astute and perspicuous adroitness with which he wrests the evidences of the truth which he dislikes.

But, to return: The vindication of the à priori validity of this intuition of cause deserves all the care it has received. It is the most important of our primitive notions, essential at once to all human science and to natural theology. It is the very key to the study of nature. It is, to change the figure, the corner-stone to all the sciences of material nature. It is, on the other hand, the foundation of that argument for the being of a God, drawn from his works. It is really on his heresy about causation that Hume grounds his famous argument against miracles. It is on the same error he grounds his objection against our teleological argument for God's existence, that the world is a "singular effect."

This vindication has also, I think, given the student an illustration of the justice of Archbishop Whately's doctrine, that true inductive logic is, after all, but a branch of the syllogistic. Sir William Hamilton has indicated that Whately, in announcing this assertion, had but an inaccurate conception of its true import, but he deserves the credit of looking in the right direction for the truth. The answers made to the question: "What is induction?" are crude and contradictory. Some logicians, and many physicists, seem to think

that the colligation of similar instances, in considerable number, is inductive argument. Hamilton ("Metaphysics," Lect. 37th,) declares that this is the usual blunder of all English writers on the inductive logic. He very properly declares that an induction from some to the whole is worthless, and that there is no real demonstration until the connection of antecedent and consequent, observed in a part of the instances, is shown to be necessary by the subjective laws of the reason. So, I have cited Bacon, declaring that if the induction proceed no further than a mere enumeration of agreeing instances, it is wholly short of a demonstration, and can but raise a probability of a law of causation, which is always liable to be overthrown by contrary instances. It is this mistake, which accounts for the present loose condition of much of what claims to be physical science. In too much of this, an almost limitless license of framing hypotheses which have a show of probability prevails, claiming the honored name of "Science" for what are, according to this just rule, but guesses. others, seeing the obvious defect of such a definition of inductive argument, and yet imagining that they are obliged to find an essential difference between inductive and syllogistic logic, invent, I know not what, untenable definitions of the former. Inductive demonstration is, in fact, only that branch of syllogistic reasoning which has the intuition, "Like causes, like effects," as the major premise, and which seeks, as its conclusion, the discrimination of the post hoc from the propter hoc, in seeking the true law of cause in the sequences of nature. One may, if he chooses, use the word "Inductio," to express the colligation of similar instances of sequence. But inductive demonstration is another matter. and a far higher matter, which is still to come after. It is the logical application to these instances colligated of some law of the subjective reason, which is able to detect infallibly the causative antecedent amidst seeming antecedents. Its preciousness is this: that when once that discovery is made, we have a particular law of nature, a true principle, which is a guide of future belief and practice. But why does that discovery uncover to us a law of nature? Because we know that the great truth reigns in nature: "Like causes. like effects:" or, in other words, because the reason has evolved to itself the self-evident notion of efficient power in cause. Now, we found that the valid application of a discriminating canon of induction is, in each case, a syllogism, a syllogism of which the primary intuition is first premise. Hence, if there is no complete demonstration from mere enumeration of instances, in asserting our intuitive notion of efficient cause, we have been defending the very being of the natural sciences, as well as the very citadel of natural theology. And we now see how the Sensualistic school of metaphysics is as blighting to the interests of true, physical science as of the divine science. The inductive method, in the hand of physicists, who grounded it substantially in the metaphysics of common sense, gave us the splendid results of the Newtonian era. That method, in the hands of Comte, J. S. Mill, and Spencer, is giving us the recent corruptions and license of Evolutionism and Atheism. The unhallowed touch of the Sensualistic school poisons not only theology, which they would fain poison, but the sciences of matter, which they claim. as especially theirs.

I think we are now prepared to appreciate their clamor against our postulating "final causes" for natural effects. They even attempt to quote Lord Bacon, as sanctioning their opposition. But all that he says is only to object to the confounding of the inquiry into the natural, and the final cause. He only aims to teach us, that in physics we must proceed by the ascertainment of the efficient natural causes. In metaphysics, he allows the inquiry for the final cause to be legitimate

and useful. Why, for instance, do hairs grow on the human brow over the eye? This "why" really asks two distinct questions. It asks for the natural cause: and the answer is, that the skin there contains that cellular arrangement (lacking on the rest of the brow) which nourishes the hair-bulbs. But if it asks for the final cause, the answer is: men have hairy eye-brows, in order to shield the eye from perspiration and other descending obstructions. Now, it will be very bad physics, to mix the answer of the second question with the first. But it will be worse metaphysics to reject the second question and its answer. In fact, I assert that it is only by postulating final causes, that we can have any foundation whatever for an inductive science, leading us to any general laws of natural causes.

Let us recall our positions: We have seen that the sole problem of induction is to discover, among the seeming antecedents of an effect experienced, the true, efficient cause. That infallibly ascertained, we have a general law of nature. What authorizes us to assume it as general? The conviction that like causes, under like conditions, must produce like effects. [And that conviction, as we saw, must be à priori to experience as to its authority: or otherwise experience could never make it valid, and the certain demonstration of any regular law of nature would be impossible: i. e., science would be impossible.] But on what condition can that ground-principle be valid to the reason? If there is nothing in nature truly answering to the à priori notion of power in cause; if all the mind is entitled to postulate is mere, invariable sequence; if the notion of efficient power is to be excluded, because not given in sense-perception, is that belief either valid or necessary? Obviously not. Again: if cause is only a material efficiency—only a relation between properties of two bodies, blind, senseless, unknowing, involuntary, in matter, which is passive yet mutable,—is there any

possible foundation for a necessary judgment of the reason that effects must, always and everywhere, be as invariable as their causes? Obviously not. It is only when we assume that there is a Creator to the creation. and that the natural order is the expression of an intelligent will, that our confidence is consistent. That is to say: law implies an end; or in other words, a final cause. Physicists delight to talk about "laws of nat-What is a law of nature? It is the regular method of an observed force: force being blind, involuntary, and unintelligent. But law, in its proper sense, is the expression of intelligent will; and it implies intelligence and volition in its subjects. To speak of a law of material nature is therefore to speak in metaphor. If the belief in an intelligent Providence over nature be banished, then all our physical science will be found built upon an unwholesome metaphor. Matter has neither mind nor will in it: and therefore if there is no Mind and Will over it, it must be lawless. The reason. which intuitively imputed law to it, as human reason insists on doing, would be founded in a lie. But wherever an intelligent Will imposes on anything a regular method, it must be with a view to some end. We may not know what the specific end is: but we know that an intelligence, which did not think and purpose to an end, would be no intelligence; an express contradiction. But I repeat, That End is Final Cause. It is the constancy of the Creative Mind to it, which grounds the invariability of cause. Here is one of those ultimate correspondences between the will of God and the reason of the creature, on which the possibility of legitimate science is conditioned. God has evidently made the human reason "to match" with the constitution of nature which He has also ordained. Deny a Providence working to its own (secret) final causes. and the necessary intuition of the reason would be found illegitimate. The logic of the atheistic physicist is uprooted by its own hand, from its very foundation; and here we have the explanation of that chaos of hypothetic license into which physical research in their hands is falling.

In the previous chapter we showed the validity of our à priori cognitions. In this we have showed that they are original, and not the mere results of experience. The bearing of these conclusions on the question of the mind's spirituality is very near and simple. If the mind contains, in its original, the law of rationality, including potentially these highest notions and judgments of all its future intelligence, then, of course, mind is not evolved from anything non-rational. We have seen the followers of Condillac (more consistent in this than he,) concurring with the Evolutionists of our own day, to teach that the creature's environment was the efficient cause of his faculties; that his objective experiences shaped his forms of intelligence. In demonstrating the existence and authority of à priori cognitions, we have overthrown this scheme. For we have shown, with Plato, that the mind itself is Rational Cause, is efficient, and does not merely receive, but confers: it does not merely submit to impressions, but it makes those objective impressions as it receives them, imposing upon them its own original forms of cognition and logical connections. Rationality is thus demonstrated to be elemental to the mind, not superinduced upon it. And now from this simple, but commanding point of view, can any one doubt that a supreme Reason was requisite to the production of minds? There must be enough in a cause to account for all that is in its effects. That reason which, in its limited measure, is native to man, is doubtless eternal and perfect in God. We are thus, on the one hand, led back to the old argument, from spirit to God: Because I am a rational spirit, therefore there must be a spiritual Creator, infinite Mind. And on the other hand, we are taught that evolutionism, with its materialistic result, is absurd. We have found that rationality is an original, active power, which is in order to cultivation, and therefore cannot result from it. The affinity between evolutionism and the false, Sensualistic psychology is now unmasked.

CHAPTER XII.

REFUTATION OF SENSUALISTIC ETHICS.

THE ethical theory of Sensualism was briefly delineated in my fourth Chapter. It was there remarked that the Sensualist's denial of à priori principles to the reason shuts him up to the attempt, which he always makes, for resolving the functions of conscience into artificial habits of mind, of one kind or another. It thence became obvious, that if these solutions are refuted, and it appears that the ethical functions of the soul cannot be resolved into any modification of other functions, then they remain primary, and Sensualism is thus shown to be fundamentally false. To this crucial test I propose now to subject the system. We shall set aside all these pretended reductions of the original ethical function, to some lower; and thus, by a process of exclusion, we shall reach the rational psychology, which gives us the wholesome truth. This part of the discussion will thus gain for us the two ends of inflicting upon the Sensualistic Philosophy a signal overthrow, and of reinstating and instructing our practical judgments in the all-important sphere of duty.

The grand condition of moral responsibility is rational spontaneity. This proposition is the first of the intuitions of conscience which the Moralist postulates. Both subject and predicate are given us immediately in consciousness. I am conscious that I am spontaneous in my own acts. It is as impossible to deny this fact, as it would be to demonstrate it deductively. As

Cousin well remarks, this immediate testimony of consciousness to our free-agency must supersede any arguments against it, because the premises of those arguments must be given by the same consciousness. It is the inalienable prerogative of the Ego to say, what I do is self-prompted; else it were not I! So, every man knows by a primitive and necessary judgment, that this spontaneity is the condition of his responsibility. Common sense says: "I am responsible for what I do of myself." But what is spontaneity; and especially, how do its most explicit acts, volitions. arise? Sensualism dare not deny the necessary truth; and it therefore sophisticates the answer. It attempts to make us say that our freedom as rational agents consists only in the privilege of executing what we have willed. But my consciousness obstinately replies, that I am also a free agent in having that volition. There was the essential feature of choice; there rational preference first exhibited itself. How did the volition arise? Sensationalists, from Hobbes to Mill, are virtually agreed in answering: Volitions are effects of desires; and desires are the effects of sensations; desire is, indeed, but the sense-impression re-appearing in a reflex form. Just as animal pain is the effect of the blow, so resentment is the effect of the perception of the injurious purpose, or concupiscence, of the attractive object. Man's whole volitions, therefore, are caused from without. While he supposes himself free, he is the slave of circumstances. The only escape which J. S. Mill can find from this consequence of his father's sensualistic analysis, is, to deny, against reason, that there is any efficiency in cause. Were the notion of cause properly interpreted, as containing the notion of efficient power, he admits that every volition would be necessitated from without. But he proposes to save man's freeagency, by the doctrine that there is no relation between the cause and its effect save that of sequence!

The consciousness of true freedom in every soul is the sufficient refutation of this theory. But to remove it thoroughly out of our way, and also to explain and prepare the way for the true scheme, I add, that it confounds the practical distinction between the objective occasion, and the subjective cause of volitions. As this is vital, let us agree upon a nomenclature here; and bargain that the object shall be called the inducement to volition, and the subjective cause, its motive. In our popular speech, we are constantly confounding the two: we speak currently of the alcoholic drink as the motive of the drunkard, and the money stolen as the motive of the thief. But we need only to inspect our thoughts to distinguish this confusion. Motive is Motivum, that which moves: the efficient of the volition. But is the liquid really active? Surely it is a dead, material, passive thing, as the drunkard looks at it. Its physical properties contain as yet only potential (not actual) powers over the nerves; even these only become active physically, after the drunkard's voluntary act has established the relation of contact. Suppose him now conceiving the object in thought; or if you will, perceiving it by evesight, but at such a distance that its fumes do not even reach his nostrils. says, this "liquid attracts him." But this is heedless speech: he attracts it; the liquid is dead and passive. The activity, which is that of conception and concupiscence, passes precisely the other way; from the sentient free-agent to the dead material. It is the soul, which is moving toward the liquid, to make it the helpless instrument of its volition, not the liquid which The material is only victim: it is the moves the soul. soul which is agent. This is demonstrated, second, by the simplest canon of induction. Like causes should produce like effects. There were two poor men who were servants of houses of entertainment. In both were lodgers, who heedlessly left their purses, containing gold, upon their tables. These servants, coming in, saw their opportunity to appropriate it. In each case there was the same need, the same opportunity, secrecy, and impunity. But one of the servants stole the purse he found, and the other restored what he found to its owner. Now we cannot say that, in the first case, the gold caused the theft. For had gold been the cause of theft, like causes should have produced like effects. The gold was only the occasion (or inducement) of the theft, and another cause must be found for each of the two volitions. The cause of the theft was cupidity; as the cause of the restoration of the other purse to its owner was honesty (or policy). The sources of the causations were in the two men, not in the two purses. And this is a fair example of an experimental inductive proof, which might be extended as widely as the customary actions of mankind.

The inquiry into the nature of free-agency should be. chiefly, a process of faithful observation of consciousness. We should discharge our minds of all preconceptions and hypotheses, and selecting a characteristic or fairly representative case, carefully inspect the conditions under which volition arises in man. We are all aware of the fact, that some volitions are much more uncertain and variable than others; and these are the cases where the attention is feeble, or almost wholly absent, or the object is trivial, or its relation to our subjective desires contingent and mutable. To examine fairly, then, we should select the more serious cases of choice, where there is permanency and weight of obiect, and conscious deliberation in the agent. If we accept the current history of Julius Cæsar, his deliberation at the Rubicon, and his consequent decision, present us just such a typical instance as we seek. Let us examine the action of this soul here, in the light of our own consciousness and our practical knowledge of human nature. We see, first, that the real problem is not the

muscular acts by which Cæsar plunged his horse into the ford, and made the decisive passage. These were merely the effects, in which a determination of soul expressed themselves. Nor, in the second place, is the action of the free-agent sufficiently explained by saying that his free-agency consisted in the liberty to execute his own determination. In this case, what does such a statement mean? Only, that no material obstacle, such as a wall, or an opposing army, then stood on the southern bank of the Rubicon. The absence of this constituted, obviously, Cæsar's opportunity, and not his free-agency. The real question of free-agency remains still untouched; it is this: How did the determination of mind then and there to use that opportunity, arise in this man? Now, the consistent follower of Hobbes would say that it was efficiently caused by the conception of the power, and wealth, and fame, which lav before him, attainable by that act. But this is false, as appears from this simple view: Had it been the virtuous Cato who stood upon the bank of that river, and had imagination portrayed the very same visions of fame, power, and wealth before him, he would not have crossed the Rubicon to assail the legislature of his own country. The objects seen in imagination were not the true efficient then; for "like causes must produce like effects." We must look deeper; the true cause must, obviously, be found in the subjective differences between Cato and Cæsar. And that difference was inordinate ambition. But did the objects cause the ambition, and thus cause the ambitious volition? No; the objects merely presented an occasion to the ambition preëxisting; for here, again, the same argument applies: these objects did not cause an inordinate ambition in Cato's spirit. The true motive, then, of Cæsar's volition was his own ambition, which was his subjective affection, and a spontaneous out-acting of his self-hood. When we get back to this affection, we have obviously reached the ultimate and simple fact of spontaneity. Nobody made Julius Cæsar feel ambitious; the objects and opportunity did not make him feel so; they were passive; they merely presented the occasion, or opening, for the existing, spontaneous feeling to flow out.

But one more fact remains to be noticed in this analysis. It is said that the Dictator Sulla, in his later years. studied the character of the young Julius, and predicted that he would, in time, prove a formidable usurper. This suggests the other fact, that while voli tions are free, yet they often have such uniformity of quality as to enable us to predict them. Whence this uniformity? What was it in the spirit of the young aspirant, Julius, that enabled the old politician, Sulla, to predict confidently that he would one day play the usurper? Common-sense answers: an ambitious character. The case implies, of course, permanency in this character. No one means, when he says, that "I. Cæsar was of an ambitious character," that the emotion of ambition, in a specific form, was continuously active in Cæsar's consciousness. Daily he slept some hours. Often his consciousness was for a time occupied with study, or with amusement, or with social affections, or with other evil passions, as lust or anger. Wherein, then, consisted the continuity of this ambitious character, at such times? The answer leads us to another fundamental fact: the fact of permanent disposi-This all-important fact in free-agency is what the scholastic divines termed Habitus (not consuctudo). It is the permanent subjective law of man's free-agency: the regulative principle of his free affections and determinations. The habitus, or disposition, may be known: as it is permanent and regulative, the perception of it enables the observer to foretell with certainty how the agent will freely decide in the presence of given objects. Some dispositions are acquired; others are original;

and these are universal among men. Thus: every human being is certainly, and permanently, and always determined freely to choose happiness rather than miserv. whenever the alternatives are presented, and the choice is to be made by him of one or the other result for its own sake. It is simply and absolutely certain, that no man is going to choose his own misery, merely for the sake of being miserable, when the option is offered to him simply as such. Why certain? Not because the man's choice ceases to be free; but because it is his native and fundamental disposition freely to desire happiness. If there be other dispositions also original and permanent, they will be found equally regulative of the free-agency. And it is the overlooking of this fundamental fact of dispositions which has complicated the question, how the will acts, in the hands of so many philosophers. Dr. Reid and Cousin. for instance, saw clearly the irrefragable truth that the freedom of man is something more than liberty to execute such volitions as arise in his spirit. They asserted the great truth, that the soul is self-determining. But in order to sustain that all-important truth, they vacillated toward the self-contradictory doctrine of the semi-Pelagians, that the faculty of will is itself selfdetermining. They saw clearly the central truth, that the soul (and not the objective inducement) is the true cause of its own acts of choice; and hence man's just responsibility. They overlooked the other fact, that this true cause, this real Power, Soul, like everything else in the creation of the All-wise God, has its own regulative law of action. This regulative law is its own dispositions. This fact of disposition is an ultimate fact of consciousness, coëxistent with the other great fact, spontaneity. It is as vain to ask, "Why the soul is disposed as it is natively disposed," as to seek a prior root for its spontaneity. When we have gotten to the fact, spontaneity, and to its regulative law, disposition, we

are at the end of our analysis: we stop at these original principles of the rational agent.

All assert man's freedom, then; but when we ask wherein consists man's free-agency, one party answers: In the self-determining power of the Will; the other. In the self-determining power of the Soul. The one party asserts that man is not truly free and responsible unless the will remains in equilibrio, after all previous conditions of judgment in the understanding and emotion according to the native dispositions are fulfilled. and unless the act of choice be an uncaused change, capable of arising out of the faculty of choice itself, even against the stronger subjective motive and the original disposition. The other party teaches that, while the soul is spontaneous, and the true efficient of every rational volition, this spontaneity, like every other power in the universe, acts according to law; this law being the disposition which spontaneously regulates the soul's subjective states, and thus its determi-Volitions are, therefore, not uncaused: but follow the soul's own view and desire of the preferable: which constitute the true or subjective motive.

The latter is evidently the true doctrine; because, first, our consciousness tells us so. Every man feels, that when he acts as a conscious being, he has a motive for acting as he does: and that if he had not, he would not have thus acted. The very conception which every man's common sense gives him of his own rational choice is, his choosing according to his own motive, or acting because he had a reason for so acting. Second: Otherwise, we should never make any recognition of character, or permanent principles, in ourselves or our fellow-men. For there would be no efficient influence of the man's own principles over his own actions; so that the ordinary current of the actions would not be a certain index of the character, as all men of good sense believe they are. One's princi-

ples might be of a given character, and his actions of a different character, or of no uniform character. Third: Consequently there would be no certain result from human influence, over man's actions and character, in education and moral government. We might educate the principles, and still fail to educate the actions and habits. Or, vice versa, we might control the actions uniformly, and still fail to affect the principles. fact would be impossible, which we all experience every day, that we do cause our fellow-men to put forth certain volitions, that we can often do it with a foreseen certainty, and still we feel that those acts are free and responsible. Fourth: Otherwise man might be neither a reasonable nor a moral being: not reasonable, because his acts might at last be wholly uncontrolled by his own understanding; not moral, because the merit of an act depends upon its motive, and his might be motiveless. If the self-determined volition has its freedom essentially in this, that it may be uncaused even by subjective motive, no act would be in the truest sense so free and virtuous as that which the man did without any present reason for doing it. But does not the virtuousness of the act depend essentially upon the kind of motive which moved him to do it? Fifth: In the choice of one's summum bonum, the will is certainly not contingent. Can a rational being choose his own misery and eschew his own happiness, apprehended as such, for their own sakes? Yet that choice is free—and if certainty is compatible with free-agency in this most important case, why not in any other? Sixth: God, angels, saints in glory, and the human nature of Jesus Christ must be certainly determined to right volitions by the holiness of their own natures, and, in all but the first case, by indwelling grace and the determinate purpose of God. So, on the other hand, devils, lost souls, and they who on earth have sinned away their day of grace, must be certainly determined

to evil by their own decisive evil natures and habits: vet their choice is free, in both cases. Seventh: If the will were contingent, there could be no scientia media even: much less an immediate omniscience; and we should be compelled to the low and profane doctrine of the Socinians, that in the nature of things, God cannot foreknow all the acts of the creature. For the only intelligible definition of scientia media is, that it is that contingent knowledge of what free agents will choose to do in certain circumstances, arising out of God's infinite insight into their dispositions. But if the will may decide in opposition to that foreseen disposition. the foresight of it is no ground of a knowledge what the volition will be. Nor is it sufficient to resort to the incomprehensibility of an infinite understanding to us, to evade this contradiction. For the infinite perfection of the divine mind renders it not easier, but more impossible for it to hold the consistency of a species of knowledge purely conditional, when the very condition is denied. If a correct mind certainly foresees an act. then that act must be certain to occur: else this certain foreknowledge is incorrect. It thus appears that nothing which is embraced in the divine foreknowledge can be contingent with God. But to return-Eighth: Were volitions contingent, God would have no certain way of governing free agents efficiently, consistent with their free-agency: Acts might at any time be done by them contrary to God's most fixed purpose: and the only government possible for Him would be one of mutable expedients, devised to meet undesigned failures of His real plan. Nor could He bestow any certain answer to prayers, either against temptation and our own wrong choice, or against the wrong purposes of others. Last: The demonstration may be closed by the famous reductio ad absurdum, which John Edwards borrowed from the Scholastics. If the will is not determined to choice by subjective motive, but determines itself, then the will must determine itself to choose by an act of choice, for this remains its only function. That is, the will must choose to choose. Now, this prior choice must be held by our opponents to be self-determined. Then it must be determined by the will's act of choice: that is, the will must choose to choose to choose. Thus we have an endless and ridiculous regressus.

But the current objections are, that our view makes man a machine; an intelligent one, indeed; but yet a machine, in which choice follows motive by a natural, and so, a necessary tie. The answer is, that the analogy suggested by the objection is false. Man has no feature of the machine, save that his spontaneity always has some regulative law. The essential trait of the machine is wholly lacking; a physical motive power outside himself. Man's motive power is himself; the external object is inducement only, not motive. The motive is the agent's own judgment and desire, just as truly as the determination is the agent's own choice. The motive power is within, and therefore the man is not a machine. The agent is a monad, without parts; and therefore the man is not a machine.

It is objected, again, that this doctrine fails to account for those cases where the man determines against his own better judgment and feelings. Thus, it is said: the drunkard violates his own better judgment and his own sincere and anxious resolutions and desires by taking the intoxicating drink. In this case, it is urged, we have a volition contrary to the prevalent judgment and preference. I reply: No; the man has chosen precisely according to his own prevalent judgment and preference at the time. This drunkard may judge that sobriety would be the preferable good in the end, or as a whole; but as to the question of this present indulgence,—which is the real, immediate object of his volition, both judgment and propensity concur at the time

to prefer it as the present good; otherwise he would not take it. It is true that the understanding is now misinformed, by strong propensity, to judge differently from its former judgment; and the delusive hope of subsequent reform, combining the advantages of future impunity with present enjoyment, leads him to cheat himself with the idea that the preferable good is this immediate indulgence, to be followed by a future reformation, rather than immediate self-denial. Even Aristotle ("Nichomachian Ethics," Book IV., § 3,) saw that this was the true solution of such cases of free-agency.

It is objected that our repentance for having chosen wrong always implies the feeling that we might have chosen otherwise had we pleased. I reply: Yes; provided that different choice had been preceded at the time by a different view and feeling of the preferable. No man, who understands himself, supposes that he would have chosen differently, had he judged and felt as to the object precisely as he did. The thing for which the repentant mind blames itself is, that it had not those different and rightful judgments and desires, prompting the different volition. The conclusion which is really proved by all such instances is, that men know themselves to be blameworthy and responsible for wrong judgments and desires, as well as for wrong volitions. For, their consciousness tells them that both are functions of their own spontaneity.

It is objected, again, that our doctrine cannot account for any choice between objects precisely equal. The answer is, that the equality of the objects by no means implies the equality of the subjective desires. Is the mind ever in precisely the same state of desire for two minutes together, even as to one and the same object? The feelings are in a state of perpetual ebb and flow. In the case supposed, although the objects remain equal, the mind will easily make a difference; perhaps an im-

aginary one. We must remember that there is already a subjective motive, which is sufficiently prevalent, for choosing some one among the equal objects. The objects being equal, an infinitesimally small preponderance of view and feeling will suffice to overcome the remaining *inertia* of will as to the choice of the one equal object over the other.

But the leading objection is, that if the volitions are any way necessitated, man cannot be justly held responsible, or rewarded, or punished. There is, of course, a sense in which this is true, and hence the plausibility of the cavil. But the objection confounds compulsion with certainty of choice. If the man were compelled to an act against his will; if the act were in this sense involuntary; then he would be neither responsible, nor meritorious, nor guilty. But the question is, whether the certain or efficient connection between man's own free judgments and desires and his volitions impairs his responsibility; and to this question reason and experience give a very clear negative. God has repeatedly punished wicked men for free evil acts, which He had predicted; but their prediction showed that their performance was certain. Again: we foretell the evil acts of the sensual and vicious, but we blame them none the less for those acts. How are we enabled to foretell them? By our acquaintance with their dispositions, and our belief in the certain connection between disposition and volition, supposing the presence of the appropriate objects. And we do not consider these wicked men as any the less responsible and blameworthy because their dispositions to do wrong are so strong or so decisive; we judge them only the more blameworthy therefor. Again: we procure volitions from our fellowcreatures, and we are often certain, in advance, that we shall procure the volition designed. On what else is all rational government of man by man founded? Unless the connection between disposition and volition

were certain and efficacious, we could not know whether we could successfully induce a given volition by a given object or not. But do we dream that the persons influenced are not responsible or meritorious? Or, would one of those persons concede that his right act was not rewardable, because it had thus been induced by you? Surely not. Once more: God holds evil spirits and lost souls responsible for their wicked volitions, although the depravity of their natures certainly determines them to an everlasting rebellion. All these cases demonstrate that no man's responsibility is impaired by the certainty of his choosing, in accordance with his own prevalent dispositions. But the objector returns to the charge with this argument: that we make a subjective disposition really regulative of the acts of choice. Unless that disposition is elected by the agent in an act of choice, it is in a sense involuntary. and the agent is not really free. The answer is, that disposition is an original and rudimental fact of rational spontaneity, behind which no analysis and no argument can be carried. While original disposition is, indeed. not "voluntary" in the sense of being a result of a volition, yet it is most properly voluntary in the sense of this argument: i. e., spontaneous. And of this the practical proof is, that the man exercises his ruling disposition wholly uncompelled: no one makes him exercise it. My disposition is as truly (in the language of the Greek), To &' Epol, as my volition. But we have a crowning instance, which gives the refutation to this cavil: the holiness of God. He acts with infallible holiness, because He is efficiently determined thereto by a disposition infinitely and immutably holy. Was this disposition the result of an act of choice taken by God electing it, and thus acquiring it? No; for God is eternally and unchangeably holy! Is God, then, not meritorious for His holy acts? The thought is profane. Here, then, is an Agent in whom disposition was abso-

lutely original and absolutely efficacious in regulating His volitions, and yet he is the freest and most praiseworthy of all agents. Finally: if disposition could only become morally praiseworthy or blameworthy by originating in the agent's own act of choice, from what regulative moral principle could that all-important, that constitutive act of choice have proceeded? Not from the resultant moral disposition; the child does not beget its own father. Then, from what? There is no answer; and the objector is left in this preposterous attitude, ascribing an all-important and decisive moral result to this first volition, which, according to his own scheme, had no moral motive! He makes man's whole virtue or vice a stream of moral effects flowing from a cause which had nothing moral in it! We are thus inexorably taught that the moral quality of the stream of actions depends, not on the manner of originating, but on the nature of the moral dispositions, which freely exercise themselves in regulating the specific volitions in the stream.

It is equally plain that the adaptation of any object to be an inducement to volition depends on some subjective attribute of appetency in the agent. This state of appetency must be à priori to the inducement; not created by it, but conferring on the object its whole fitness to be an inducement. In other words, when we seek to occasion volition by holding out an inducement as occasion or means, we always presuppose in the agent whom we address some active propensity. No one attempts to allure a hungry horse with bacon, or a hungry man with hay. Why? We recognize in each agent an à priori state of appetite, which has already determined to which of them the bacon shall be inducement, and to which the hay. The same fact is true of the spiritual desires of the reasonable soul. Hence, it follows that inducement alone has no adequate power to revolutionize the subjective dispositions

natural to agents. The effect cannot determine its own cause.

That view which the Sensualistic scheme gives of necessity is, then, false. True, volition always has a cause, which is the subjective motive. This cause is efficient, otherwise the effect would not follow. But the motive is subjective; it is as truly the agent's self, judging and desiring, as volition is the same self-choosing and determining. And this subjective desire. causative of choice, is a function of the agent's activity. not of his passivity. The correct doctrine here proceeds with Sir William Hamilton, in separating desire, as a conative and active power, from sensibility, which is passive. The desire is as much of the agent's spontaneity as is the choice. Thus is corrected the error of the Sensualist, who, while he taught that volition is efficiently caused by desire, also taught that desire is but the passive reflex of the objective perception of the natural good or evil. Were this true, man would, indeed, be merely a machine, governed through his desires by the fated influence of outward objects, and his freedom would be illusory. On the other hand, the true doctrine of free-agency is equally fatal to the latest phase of the sensualistic scheme, which seeks to account for all the powers of man's soul by an evolution. that truth is admitted, which we have established, concerning the existence of original and fundamental disposition, then man's nature cannot be accounted for by the action of his environment upon his sensibility. the contrary, the nature, or spiritual essentia, must be à priori to any influence of the environment. The law of original disposition must determine, in advance, whether the objective environment shall have any influence, and what influence it shall have. As we saw that the fact of conscious rational spontaneity was fatal, when properly understood, to materialism, we now find it equally fatal to evolutionism. We find that disposition, and not the objective inducement, is the real cause of those desires and volitions by which spiritual habits are fostered. Man's soul is not evolved, but created; its essentia is not determined from without, but determines from within the direction in which the culture shall take place. Thus we are led to detect the central sophism. There is a development going on in all created things; but it is only the development of natures that preëxisted, changing not their essentia, but the completeness of the essentia in individuals. The individual of a genus is developed into larger size and powers; no genus is developed into another genus, because the original essentia is predeterminant of the results of culture.

We have seen that the regulative law of every being's rational spontaneity is found in its original or native disposition. Thus, the regulative law of the divine freeagency is found in God's eternal holiness. That of the angels is found in the image of God, in which they were created. What is man's ethical disposition? The answer to this question must be found by the philosopher, by a careful observation of his own consciousness and of the conduct of his fellow-men. That man is a free agent in all his sins, he knows intuitively. That he has, by nature, an intuition of the reason, called conscience, informing him of obligation to the right, and of the ill-desert of his sin, I shall prove in the sequel of this chapter. That his original disposition is opposed to this intuition of conscience, every man may learn by faithfully consulting his own consciousness. To read this testimony aright, a few cautions must be observed. It is true that, until the man is far gone in evil, he cannot violate his own rational judgment of obligation, without pain of conscience; but let us not confound this pain with opposition of the will to sin, for the pain of conscience is involuntary. It is also true that no man's will inclines him to do all the

sins possible to him, and that social affections, love of applause, interest, habit, and stress of conscience, cause most men voluntarily to perform many duties. there remains the unhappy fact, that by all men some recognized duties are left unfulfilled, and this deliberately and obstinately, as long as they remain in their natural estate. There is, then, a certain extent to which the law of self-will, as opposed to the law of right expressed in the conscience, is the regulative disposition of even the better sort. When we inquire as to the strength or decisiveness of this law, we find that it is dominant, to a certain extent, in all; there are some recognized duties in each man's case which his heart is fully set in him to postpone, and some indulgences, condemned by his own moral reason, which he is inexorably determined not immediately to relinquish. When we inquire of the prevalence of this disposition, we find it universal among all natural men. When we seek for its source, we trace it in each person to the very earliest date of conscious choice. This law of self-will is the earliest disposition which each one manifests, and the great problem of moral education is to repress and control it. We thus reach, by the testimony of universal experience, this fact: that, while the reason intuitively and inevitably recognizes the imperative of conscience as the highest and properest rule of the rational creature, the will resists and rejects that rule, to some extent, in every man, with an opposition equally inexorable. This, surely, is the most solemn fact of human nature! shows that there is an original and fundamental warfare propagated in our race. Our nature is manifestly dislocated. It has obviously been the subject of a catastrophe. How, or when, philosophy cannot tell us; and for this reason, most of the mere philosophers have attempted to hide the great fact from their eyes, thus introducing confusion and abortion into all the practical results of their speculations. But, surely, the proper

office of science, if it is faithful, is to include all the natural facts of the case; and so, to make a correct and complete generalization of its *data*. But I have shown, by a very simple appeal to men's conscious experience, that while human nature presents these two fundamental facts, *Spontaneity* and *Reason*, there is now a radical opposition between the spontaneity and the reason, which is as original in our present native state as the two faculties themselves.

But are the moral judgments of the reason fundamental? This is the question which has been postponed, with the promise of a searching examination. In the Fourth Chapter, the answer given by Sensualism was stated, and the bearings of the two rival doctrines upon philosophy were explained. The issue there made up, we will now proceed to debate. Is any one of the theories tenable which Sensualistic philosophers have invented to account for the moral sentiments of men, as they actually present themselves in society, and as they were described in the beginning of my Fourth Chapter? I undertake to show that none of them are tenable.

The Selfish System has presented itself in varied forms, from Hobbes (who made the desire of natural good for self the whole moral motive), through Mandeville (who thought the instinctive desire for the selfish pleasure of applause was the moral motive), to Paley, who made the desire of everlasting future welfare the moral motive. The system has always this characteristic: it resolves the moral good into mere natural good, and virtue into enlightened selfishness. When pointed to the exertions of the affections usually termed disinterested, as gratitude, sympathy, benevolence, it attempts to represent the instinctive after-pleasure attending the disinterested acts as the real motive, and thus refines them also into an astute selfishness. Thus,

Hobbes, when walking in London with a sounder philosopher, gave a shilling to a cripple. When his companion said to him: There, you have refuted your own doctrine by giving voluntary aid to this suffering stranger, Hobbes answered: No; the real motive was still self-interested, being composed of the relief which his own sympathetic pain experienced in giving the succor to the object, and of the selfish pleasure of the applause associated with the act.

To all the phases of this selfish system I object, first: that on such a scheme the notions of right, of duty, and obligation, and of free-agency could never have arisen in the mind, and would have no relevancy or meaning. Let one frame the proposition, "Whatever favors self-interest is right," the very employment of the word "right," recognizes the fact that the mind has a standard other than that of self-interest. Any analysis of our idea of our own rights is utterly violated and falsified when made identical with self-interest. Does Hobbes say, for instance, that each man's self-interest is his own natural right? But according to his own showing, this "right" in A, would imply no corresponding duty in him, and no obligation upon his neighbor B, to respect it, and no moral recognition on the part of any other. Anybody has an equal "right" to deprive A of the enjoyment of his "right!" Whereas every man's common sense tells him that the very nature of a right involves a moral title to its possession, and a corresponding moral obligation to respect it. resting on others. In other words, does not every sane mind recognize a distinction between "a right" and the accident of possession and enjoyment?

If self-interest be the whole moral motive, then when the question shall arise, whether I shall do, or forego, a certain act, I cannot be consistently required to consider anything but this: whether my doing of it will promote that form of my selfish pleasure which I hap-

pen to prefer. If I say, "This act will most gratify me," the argument is at an end. Any judgment of obligation to restrain myself from any act is baseless. Will Epicureanism attempt, for instance, to interpose an "ought not" between me and any natural indulgence, by saying: "This proposed sensual pleasure will, indeed, promote animal enjoyment, but hinder æsthetic or intellectual enjoyment, which are higher and purer. And since pleasure is your rational supreme good, you are bound to prefer the more to the less"? If I choose to reply: "This animal good is to me the larger," the argument is ended; all ground of obligation is gone. If no indulgence is in itself less or more virtuous than another, then, in the face of an existing selfish preference, no possible argument of obligation can be constructed to restrain from any act. But are all the world wrong in supposing that there is such a bond as obligation?

If the sensualistic psychology is true, then the desire for natural good, which it makes the whole moral motive, is a passive affection of the soul. It is no more voluntary, when the object of desire is presented, than is pain when one is struck, or chill when one is deluged with cold water. But this desire for the selfish good is the efficient of the volition. Where now is that freeagency, which, we intuitively judge, is rudimental to all moral action and responsibility? Man is no longer self-directed by rational, subjective motives, but drawn hither and thither like an animated puppet, by external It is precisely as absurd to hold him bound by moral obligation, or deserving of punishment for violating the restraint, as the hungry sow, which devours the neighbor's corn. Penalties, on this theory, become the mere expedients of the stronger animals for protecting their own selfishness. And as this must remain true for the future also, all religious sanctions would be out of the question.

Second: I object to the selfish scheme from the precedence of instinctive desire to calculation, in human action. That theory supposes that the selfish pleasure apprehended by the mind in performing an act must always be the motive for doing it. But on this false analysis, how could the man ever have the volition to perform the act for the first time? The experience of the pleasure following the act only comes after! This simple argument shows that, in the first instance of volition, the motive must have been instinctive. What prompts the new-born infant to draw nourishment from the mother's breast? Will one say, the experienced sweetness of the milk? But it must have been drawn first, in order that the sweetness might be experienced. The first volition must have been prompted by instinct. This preposterous analysis assigns the effect as the cause of its own cause. Let us now apply this illustration to the moral volition. An agent performs what the world calls a disinterested moral act (moral because it is disinterested). The selfish system says that its motive was, in fact, the selfish anticipation of the pleasure experienced by the agent in its performance. But the act must be first performed, in order that any such result may be experienced. Therefore, that experienced result was not the motive of the first act, however it may enter as a part-motive in its subsequent repetitions. But if the subsequent acts differ essentially from the first, then the whole do not form one and the same class of acts; and the same moral nature cannot be predicated of the first, and of the subsequent ones. The first, we have proved, could not have had the selfish motive, and must have therefore been disinterested. The consciousness of having done disinterestedly gives the agent an inward pleasure. According to Hobbes, this after-pleasure, which proceeded from the consciousness that the act was unselfish, became a motive of mere selfishness, and, moreover, the cause of its own cause!

The absurdity of the scheme is further proved by this: If the fact that a disinterested act results in pleasure to him who did it, proves that act selfish; then by parity of reasoning, the fact that a selfish, malignant act usually results in pain to the criminal agent, proves this act disinterested and virtuous.

Third: Were the selfish theory true, the adaptation of another person's conduct to confer personal advantage on us would be synonymous, in our eyes, with merit. The villain who shared with us the rewards of his misdeeds, would evoke the same moral sentiments with the virtuous mother who blessed us with her generous sacrifices. There would be no generic difference between the hollow flattery of the courtier, for the monster on whose bounty he fattened, and the approbation of the virtuous for the most splendid benefactions of the patriot.

Fourth: If our notion of good acts is nothing but a generalization of the idea of acts conducive to our self-interest, he who has most experimental knowledge of human affairs (that is to say, he who is most hackneyed in this world's ways) should have the strongest and clearest apprehension of moral distinctions, because he would most clearly apprehend this tendency of actions. He who was wholly inexperienced could have no moral sentiments. But is this so? Do we not find that the most unsophisticated have always the most vivid moral sympathies? The inexperienced youth, ill-informed of the whole ulterior consequences of crimes, burns with moral indignation, while the hackneyed man of the world is callous.

But, fifth: The crowning absurdity of this selfish theory appears here: That our consciousness always teaches us, the moral pleasure we have in well-doing depends wholly upon our feeling the virtuous act was not prompted by selfishness; the moment we feel that this was our prime motive, our self-approbation is wholly

marred. Indeed, the best and the sufficient argument against this miserable theory would be the instinctive loathing and denial uttered against it by every rightly-constituted soul. The honest man knows, by his immediate consciousness, that when he does right, selfishness is not his motive; and that if it were, he would be utterly self-condemned. As Cousin nervously remarks: Our consciousness tells us that the approbation we feel for disinterested virtue is wholly disinterested, and it is impossible for us to feel it, unless we feel that the agent who pleases us was disinterested in his act. Thus a thousand things in the acts, the language, and the affections of men are utterly irreconcilable with this hateful analysis, and show it to be as unphilosophical as degrading.

In the next place, I group together three theories of the nature of virtue, which really amount to the same: That of David Hume, who taught that we apprehend an act to be virtuous because it is useful to mankind: That of Jeremy Bentham, who taught that virtue is pursuing the greatest good of the greatest number: And that of some New England speculators, who teach that virtue consists in benevolence. The latter is practically the same with the two former. This appears from the fact, that the practical expression of benevolence is beneficence. The useful is but the beneficent: so that it comes to the same to represent utility as the essence of virtue, or to represent benevolence as such. The latter theory is a natural offshoot of that speculation of Jonathan Edwards, which makes virtue consist in love of being in general; and its filiation may be seen in the remarks just made. These schemes derive all their plausibility from three facts: It has been so often said that "honesty is the best policy," that men come to think it is the goodness of the policy which makes it honest. Again: to promote utility, or to do acts of beneficence to mankind, is right and praiseworthy in a

multitude of cases: the duties of benevolence are du ties, and a very extensive class thereof; but not for this reason exhaustive of all duties. Once more: in the business of legislation, the expedient is very largely the guide of the magistrate, and civil governments punish crimes chiefly in proportion to their tendency to injure the well-being of society. This might easily deceive one who, like Bentham, was far more a legislator than philosopher, and lead him to suppose that he had found in the beneficence of acts the essential element of their virtue. He forgets that human laws, while they adjust their penalties to the intrinsic elements of wrong-doers, if the legislators are righteous, yet propose as their proximate end the protection of human well-being in this life, and leave the final and exact apportionment of men's deserts to God, as His proper function.

The "Benevolence scheme" appears in its most ingenious, and least obnoxious form, in the hand of Edwards, as Love for Being as being. But Edwards himself admits that distinction made by the current of ethical writers, as by the good sense of mankind, between the love of moral complacency and the love of benevolence, or simple love of kindness. The latter is the benevolent feeling which the good exercise toward their fellow-men, simply as sentient rational beings, irrespective of any moral attractiveness. The former is the love and delight of which moral excellence is the object. It is impossible for the Utilitarian, or any one else, to banish the distinction. For instance: Holy Writ saith that God loves sinners, and that God hates sinners: Are these sheer contradictions? It says that God loves the righteous and hates the evil; and also that "God commendeth his love to us, in that while we were yet sinners, Christ died for us." Now the only possible solution of these statements is in the distinction just drawn. God loves sinners, despite their moral unworthiness, with the love of benevolence: He loves

the righteous, on account of their moral worthiness. with the love of complacency. The same things are true of wise and virtuous men: the righteous parent loves his reprobate son, despite his unworthiness, with the love of benevolence; but his virtuous son, with the love of complacency also, on account of his moral worthiness. Now this unavoidable distinction overthrows Edwards' scheme. When he defines virtue as the love of Being as being, is it the love of benevolence, or the love of moral complacency? He is compelled to answer, as he does, that he means the love of benevolence. For, if the affection intended were the love of complacency, this would at once imply a moral object exciting it; and the essential element of virtue would thus be inevitably differentiated from the love, as object and emotion. Edwards is too perspicuous to fall into that contradiction; and so he defines that love of being as being which, he thinks, constitutes the essence of virtue, as the love of benevolence. But this leaves him involved in another contradiction. If this love of being as being is of the essence of virtue, it must, of course, be an object of moral complacency. But is it not virtuous to be morally pleased with the essence of virtue? Surely. Thus the love of complacency is again identified with its object, and the inevitable distinction between object and subjective affection is again confounded. The only escape from this labyrinth of contradictions is to say, with us, that the love of benevolence is (not the essence of all virtue, but) under proper limitations, one of the virtues, distinguishable as species under genus, from all the other virtues, as, for instance, from that other virtuous affection, the love of moral complacency.

It may be remarked again, on this "benevolence scheme" of moral obligation, that it tacitly assumes the existence and validity of the moral intuition, and of the distinct category of judgments with which it professes to dispense. Suppose an avowed advocate of the Selfish system to demand of Bentham, or of Edwards: Why is benevolence virtue? Why is it my duty to make the greatest good of the greatest number my moral end? They could find no valid answer until they had recognized the original distinction between advantage and right, and the obligation for the latter, as distinguished from the former.

But I charge that these utilitarian schemes of ethics are all, in fact, modifications of the selfish system. They loudly claim to stand in contrast to the latter, because they profess to propose, not the advantage of the agent's self, but the well-being of mankind, as the element of all virtue. But as Jouffroy well argues, they really involve the whole vice of the selfish system. For, when the question is raised: Why do men regard the useful (or beneficent) as the right? the answer must be: Because natural good is man's supreme rational end. But must it not follow thence, that desire of natural good is man's highest motive? Thus the moral motive, and the all-important distinction between natural good, or mere advantage, and moral good, are as completely left out of the analysis as by Hobbes himself. same absurd psychology is also assumed, which makes desire of good the result of experienced good, whereas the desire must exist and act first, or the good would never be experienced. But farther, these schemes all propose aggregate humanity as the true End of our moral action. This is involved in the doctrine that promoting the well-being of mankind is the very essence of all virtue. But our supreme End is virtually our God. These speculations, then, present the singular coincidence of concluding with the materialist atheist, Comte, that aggregate humanity is the Great Being. But worse yet: as the individual agent is a part of that aggregate, he is a part of his own God! He is, moreover, the nearest attainable part of that End; he is the

only part for whose welfare he is directly responsible: he is the part whose welfare is most within his own keeping, and for which therefore he can labor most effectually. If the natural good of mankind is the proper end of all action, then his own personal good must be the properest end of his own actions. I see not then. how, from the Utilitarian premises, the practical conclusion can be avoided, that each man is his own properest supreme End-his own God! What more intense expression could be given to the most utter selfishness? It is instructive to see Dr. Samuel Hopkins, an outspoken advocate of the benevolence scheme, after narrating through many pages its disinterestedness, coming (in his First Vol., Chap. 8) to this conclusion, and avowing that self-interest must remain practically each man's immediate guide. Thus we are led back to the vilest results of the selfish system. Such. experience teaches us, is the practical tendency. While the Utilitarian schemes profess great equity and philanthropy, they end in making their votaries supremely selfish and remorselessly unfeeling. The practical moralist may here learn, both from reason and experience. that no basis is laid for true virtue until the Right is clearly separated from the Advantageous, and is made the single rule of the soul. No man begins to be truly honest until he forgets to think of the maxim, that "honesty is the best policy."

I argue, second, these schemes do not correctly state the facts of our consciousness. The mind does not always feel that the obligation to an act is its utility or beneficence; nor that the merit of the agent arises out of, or is proportioned to, the advantage his act effects. How often, for instance, do questions arise as to the obligation of speaking truth, where, if the utility were the element of the obligation, none would be felt! Yet in such cases, the soul might feel most guilty had falsehood been uttered. These schemes do not sufficiently

explain the high obligation to honor the dead, whose well-being cannot be affected by us. Especially is it impossible, on these principles, to explain that highest of all obligations, to be grateful to God, to worship Him, and to honor Him with our offerings. For, these duties cannot promote His well-being, inasmuch as He is already supremely happy, and as He is independent and unchangeable. Will it be said that these acts toward God are only obligatory because of their reflex tendency to promote human welfare? This subterfuge would exhibit the profanity of the whole theory in the most glaring light; for they would make mankind the true End, and therefore the real God, and Jehovah a species of omnipotent conveniency, and servitor to His creatures. Again: were beneficence or utility the essence of virtue, the rightfulness of acts would only be apprehended so far as experience had given us knowledge of the beneficence or mischievousness of their effects. Is this so? Does not conscience lash us for secret sins which leave no loss of health, capacity, or reputation behind them, so far as we know, and lash us all the more promptly and keenly, as we are inexperienced of crime and its wretched consequences? Again: were this theory true, all really useful things should affect us with similar sentiments of moral approbation: a convenient bureau, or a good milch cow, as truly as a faithful friend or a benevolent rescuer. Does Hume attempt to escape by saying that it is the rational and voluntary useful act which affects us with the sentiment of approbation? Then, we reply, he has given up the case: for evidently the morality of the act is not in its utility, but in its rational motive. Once more: if utility is the virtuous element, then the degree of usefulness should be the measure also of merit. We should always feel these acts to be most meritorious which were most advantageous. But do we? Which ennobles Daniel, for instance, most in our eyes-the heroism which refused to bow his conscience to an impious prohibition of the king of Persia, when the penalty was the lion's den; or the diligence which dispensed order and prosperity over one hundred and twenty provinces? The extravagant conclusions of Godwin must also be accepted: that duties must be graded by us according to the public importance of the persons who are their objects; so that it might be the son's duty to see his own obscure father drown, in order to save the more valuable life of some stranger.

Third: Were the Utilitarian schemes true, it might. in some cases, be utterly impossible to convince a man that it is immoral to "do evil that good may come." Let us suppose that the consequences of an act morally evil, so far as seen by the agent, appeared on the whole beneficial; if the beneficence of the action constitutes its rightness, it is hard to see how the person can come to any other conclusion than that the results make it right. The evasion from this is to say, that experience teaches us that evil actions are sure, in the end, and on the whole, to result in mischief, notwithstanding present appearances of utility; and that this more recondite truth will teach us, even on the Utilitarian principle, never to "do evil that good may come." This solution is inadequate: for first, the widest experience of the results of moral action would be necessary, before one would reach this moral rule. And next the intrinsic distinction between the virtuous and the beneficial is acknowledged by this plea; for the cases in hand are acknowledged not to belong to the class of the virtuous, although, so far as present knowledge goes, they do belong apparently to the class of the beneficial. The two categories must exist, then, in the mind à priori to the experience, or else the discrimination would never be made.

On all the utilitarian and benevolence schemes, we must falsify the proper theory of punishment in order

to be consistent. Of course, righteous punishment must be a righteous, a moral proceeding. But, says the utilitarian, the righteousness of all acts is their beneficial, or useful tendency. Then, the usefulness of penalties against sin must be the sole explanation and justification of the punitive policy. For a penalty must be, in its very nature, a physical evil in itself. If benevolence is righteousness, and the natural good is the properest rational end, how can any righteous ruler be justified in doing positive, natural evil to a fellow creature? This is the problem which the utilitarian has to answer. The only answer possible for him is, that the inflictions of natural evil as a penalty on a transgressor is justified solely by its useful tendency to prevent transgressions. In this matter, sin is treated simply as a mischief, or as contra-beneficial, and not for its intrinsic ill desert; and penalty is employed simply as a practical expedient, and the only one in the ruler's power which will restrain free agents. Punishment cannot be regarded as the righteous equivalent of the evil desert of sin, and as designed to satisfy the intrinsic demands of justice outraged by transgression. Now, my argument is, that this view of the nature of punishment flows necessarily from the utilitarian theory; but this doctrine as to the nature of punishment is false; and therefore the theory of the utilitarian is false. That such is not the nature and intent of punishment is proved by the consciences of both the innocent and the guilty, the former demanding righteous satisfaction for broken law, and the latter confessing the judgment in their fear and remorse. The legislation of all civilized States proves the same; for none of them accept repentance as a full satisfaction for crime (however it may combine with other circumstances in defining the cases suitable for the exercise of mercy towards the convicted). There is no country whose statute law accepts even a genuine repentance as justification and

ground of full acquittal for the convicted murderer. The general rule still is, life for life, and blood for blood. But were prevention of crime the only object of penalty, repentance meets that requirement; if it is genuine, it guarantees us against a repetition of the crime. Again: on this utilitarian theory of penalty, it might be more righteous to punish an innocent person in some cases, than the guilty, namely, where the transgressor would be more deterred and impressed by the former. For, if penalty is only a preventive policy. of course the most effectual preventive is the most righteous. Such a case may very easily occur. For instance, a chief magistrate of a city is seeking to restrain a termagant, drunken woman of ill fame, by confinement or even by stripes. She mocks at all his threats. What is the house of correction but a home by contrast luxurious, to her whose ordinary pillow is a curb-stone? Shame? What is shame to her? She has sounded all its depths already. Stripes even are naught to her, whose remorse lacerates her more keenly than the scourge. The magistrate is baffled. But now some one remarks, that there is one green and tender spot in this arid heart; she has a delicate girl. still uncontaminated, who is the only object of love she recognizes. Seize that innocent girl, and disregarding her just protest, tear her tender shoulders with the scourge; this will reach the obdurate heart of the mother. Now, if penalty is merely an expedient of repression, why is not this, the efficacious expedient, the righteous one? But every right heart cries out against it as monstrous!

Especially is this theory of punishment absurd, when applied to God's punitive government. For, first: He is omnipotent, and is always able, if He chooses, to convert and sanctify transgressors instead of punishing them, even temporarily. We must remember that, if this benevolence scheme be adopted, it must be applied

to God's virtue, as well as man's; and then we have benevolence as His only moral attribute, or the whole of his Holiness. The problem, then, is this: God is infinitely and only benevolent: He is also infinitely powerful and omniscient. Hence, He must see that it is a more benevolent preventive of transgression to convert Satan, than to punish him; and a more effectual one, for the punishment has not restrained him. For such a Ruler as God to punish him, was, therefore, a gratuitous propagation of natural evil. and disregard of the natural advantage of the universe, which advantage should have been God's first motive. The same inevitable proof would condemn every temporal penalty which Providence is inflicting, before our eyes, upon men and nations. But when we come to God's everlasting punishments, the case is terribly aggravated. For punishments that are never to end are not designed, of course, to make the sufferer better. Satan is not to be sanctified by his everlasting woe; he is to remain an increasing sinner forever. When omnipotent benevolence adopts this plan, explanation is impossible upon the utilitarian theory. Does any one say, No: the contumacy of transgressors requires even as extreme instances as these of endless punishments, to deter them from sin. The fatal answer is: Even these do not deter men: the world remains full of sin. But almighty Grace could, if it chose, convert Satan and all other stubborn sinners, and thus really attain the end of prevention. It thus appears, that the utilitarian theory of punishment will not apply to God's government, which is at once the most righteous and benevolent of all. The theory is, therefore, false.

Dr. Paley's type of the Selfish System may be said to be equally perspicuous and false. That such a specimen of impotency and sophism in philosophy should come from a mind capable of so much justice and perspicuity of reasoning as he has exhibited in the experimental field of Natural Theology, is one of the most curious facts in the history of literature. I shall first attempt to rebut the objections which he insinvates against the originality of our moral judgments, and then criticise his own theory.

He first proposes to test the question whether such distinctions are intuitively known, by supposing a case of what we call odious filial treachery, stated to a mind wholly untutored by human associations, example, and teaching; and by asking whether he, with us, would immediately feel its vileness. We answer, of course: No. But to show how preposterous the test is, we need not, with Dr. A. Alexander, dwell on the complexity of the moral problem involved. The simple solution is, that such a mind would not have the moral sentiment, because he would not comprehend the moral relations out of which the violated obligations grew. nor the very words used to state them. In no proper sense could this untutored mind be said to see the case. Now, what a paltry trick is it to argue that a certain mind has not a power of comparison, because it cannot compare objects which it does not see at all!

None of Paley's objections to our moral intuitions are boldly stated; but he intimates that our moral sentiments may all be accounted for by association of ideas, and imitation of our fellows. Thus: "Having noticed that certain actions produced, or tended to produce, good consequences, whenever those actions are spoken of, they suggest, by the law of association, the pleasing idea of the good they are wont to produce. What association begins, imitation strengthens; this habit of connecting a feeling of pleasure with classes of acts, is confirmed by similar habits of thought and feeling around us, and we dub it the sentiment of moral approbation." (This analysis is precisely in the vein of Hume.) The solution is shown to be worthless by this one word. The law of association does not transmute, but only

reproduces, the mental states connected by it. How then can the feeling of pleasure, which begins from the perceived tendency of a class of acts to produce natural good, be changed, by mere association, into the sentiment of approbation which attends the knowledge of moral good? These are widely distinct at first: as has been already shown. Again: On this scheme, how came men ever to have pain of conscience for sins which are naturally pleasurable, and are attended with no perceptible natural mischief at the time? And how could the fact ever be explained, that we often have the sentiment of remorse for doing things which are in compliance with general associations and imitations?

Dr. Paley draws another class of objections from the facts that men have no innate ideas of the abstract element of virtuous acts: and that moralists, while asserting the instinctive origin of the moral sentiments, have never been able to point to any one simple, abstract type, such as veracity, etc., into which the idea of the virtuous may be ultimately resolved. To the first objection no further answer is needed for those who understand the criticism of Locke's system. We do not hold that man has any "innate ideas" of any first truths whatsoever. But we hold, nevertheless, that man has innate powers for seeing sundry first truths, and seeing them intuitively, upon occasion of the rise of the suitable instances. The doctrine which Paley denies is. that the power of seeing the moral distinction is, in that sense, intuitive. Of course, the absence of innate ideas of the moral distinction, in advance of suitable instances, no more proves the moral intuition lacking than the (admitted) absence of innate ideas of mathematical axioms proves us lacking in rational intuitions. Paley's second objection will be found, upon inspection, a bald begging of the question. The question is, whether the notion of rightness in acts is an original or intuitive cognition of the human reason. Now, if it is,

it follows, of course, that it cannot be referred to any simpler or more ultimate type. The fact, that no philosopher has succeeded in analyzing the moral judgment into any simpler one, as veracity, harmony, love of being as being, sympathy, proves the very thing which Paley disputes; that this moral judgment is itself of ultimate simplicity, and, therefore, intuitive. Can the abstract idea of Truth be analyzed or reduced to something simpler? Can it be defined in any simpler terms? Why not? Because the general notion of Truth is already simple and primary. Who dreams of arguing that the human reason has no original capacity of perceiving truths in propositions, because there is no simpler and more ultimate type to which the abstract notion of Truth, as common to all propositions. may be reduced? This is the very fact which convinces us that the power of seeing truth in propositions is one of the intuitive functions of the reason. So, the very assertion which Paley makes of our moral judgments is the best proof that they also are original and intuitive acts of the soul. The absurdity of this point, in his hand, is also further illustrated by the fact, that he himself virtually attempts to make the very reduction which he pronounces impossible. As we shall see. he attempts to resolve the moral notion in all virtuous acts into future utility!

Paley also insinuates the common objections against the originality of our moral judgments, from the wide variety, and even contrariety of moral opinions in different ages and nations. In one country, filial virtue is supposed to consist in nursing an aged parent; in another, in murdering and eating him. On one side of the Rhine or the Danube we have seen the burning of a Protestant heretic regarded as the first of merits; and on the other, the first of crimes. It is insolently charged, that it is absurd and preposterous to regard those sentiments as original and intuitive in mankind

which thus change with a boundary line, or a parallel The answers to this confident cavil are, of latitude. that no one ever pretended any human faculty was perfect in its actings, however original. While it is absurd to refer to habit, example, and imitation, or association, as generating any faculty, they doubtless have great influence in modifying, and especially in perverting, its actings. Next—as is justly remarked by Dr. Alexander: many of the supposed cases of contrariety of moral judgments are fully explained by the fact, that the dictate of conscience, right in general, is perverted by some error or ignorance of the understanding. The bigoted Papist felt conscientiously impelled to burn the Lutheran? True. And this erroneous judgment was an ignorant and perverted application of a great moral truth: that men are responsible to God for their er-For if the Pope be "God upon roneous opinions. earth," and Lutheranism be mischievous error, then the Lutheran will be justly responsible to the Pope. The Christian mother's highest duty is to cherish the life of her female infant; the Hindoo mother is impelled to drown hers in the holy Ganges. Yet both act on the correct dictate of conscience, that a mother should seek the highest good of her daughter at the expense of her own inclinations. The Hindoo has been taught by her false creed to believe that she does this to her daughter, by transferring it in infancy to heaven. Once more: it is a most erroneous conclusion to infer, that because men perform, in some countries, what we deem odious acts, with seeming indifference and publicity, therefore their moral judgments about them do not agree with ours. An educated Bengalee lies for a shilling, and when detected, professes to laugh at it as smart. A Hottentot woman will seem shameless in unchastity. Yet Lord Macaulay assures us, that the truthfulness of the Christianized Briton produces the same moral reverence in the Hindoo as in Europeans. Livingstone tells us that the poor Hottentot has the same perception as civilized women, of the inconsistency of lewdness in the white Christian. The whole amount of the case is, that conscience may be greatly stupefied by evil influences; but her general dictates, when heard, involve the same moral principles. No heathen, no Papist differs from the Christian in the speculative judgments, that the right ought to be done and the wrong eschewed, and that he who neglects to do these is ill-deserving and worthy of punishment. When the intuition comes to be applied to particular questions of right and wrong acts, then erroneous creeds and opinions vary the practical conclusions of different men.

But Paley, having succeeded to his own satisfaction in undermining our belief in the existence of original moral intuitions, gives us his own definition of virtue. It is "doing good to mankind, according to the will of God, for the sake of everlasting happiness." obligation he defines as the forcible motive arising out of the command of a superior. The good-doing which is the matter of virtuous acts is, of course, conferring natural good. The rule is, God's revealed will; the motive is, the selfish one of winning everlasting happiness. That this scheme should ever have seemed plausible to Christian divines, can only be accounted for by the fact that we intuitively feel, when a God is once apprehended, that His will is a perfect rule of right, and that it is moral to do precisely what He commands. This is the element of truth in Paley's definition. when we raise the question, Why is all God's will obligatory? the only answer is: Because all His will like His character, is holy. To do His will, then, is not obligatory merely because God has commanded it; but He has commanded it because it is obligatory. The distinction of right and wrong is intrinsic. My assertion of the affirmative in this vexed question receives a

very conclusive demonstration, as follows: If everything that God commanded is morally right because He commands it, then His act in commanding must be morally right. But the moral quality of God's act. like that of any other moral agent, proceeds out of the subjective motive which prompts the act. The act is right, not by reason of its mere form, but of the rational principle regulating it. Then the moral rightness of God's act in commanding must be traced up to the rightness of the prior principle or attribute prompting and regulating the utterance of such command. We are thus led, in spite of objection, to the truth that the morality of the act commanded is à priori to the obligation on us: that the act is not right merely because it is commanded by God, but was commanded by Him because it is right.

Paley's theory is but a modification of the selfish system, and is, therefore, obnoxious to the same objections. He himself raises the unavoidable question, wherein virtue, on his definition, differs from a prudent self-love in temporal things. His answer is, that the latter has regard only to this life; the former considers also future immortal well-being. Dr. Thomas Brown well observes of this, that it is but a more odious refinement upon the ordinary selfish system, defiling man's very piety, by making it a selfish trafficing for personal advantage with God, and fostering a more gigantic moral egotism; by so much as immortality is longer than mortal life. This scheme of Paley is equally false to our consciousness, which tells us that when we act, in all relative duties, with least reference to self, then we are most praiseworthy.

We may add, more especially, that on Paley's scheme of obligation, it will be hard to deny that there may be as real obligation, in some cases, to do wrong, as to do right. A company of violent men overpower me, and command me, in pain of instant death, to burn down

my neighbor's dwelling. Here is "a forcible motive arising from the command of another." Why does it not constitute a moral obligation to the crime? Paley's only reply would be, that God commands me not to burn it, on pain of eternal death; and this obligation supersedes the other, because God is so superior to man, and the motive is so much more forcible. It seems, then, that it is God's might only which makes His right! Or else a superiority in holiness must be granted, and this concedes the existence of an intrinsic moral distinction, other than forcible constraint.

On Paley's scheme, there could be no morality nor moral obligation, where there was no revelation from God: because neither the rule of virtue (His revealed will), nor obligation (His forcible command), nor motive (hope of His favor through our immortality, from a given conduct), would have any existence. That is to say, there would be no virtue for Pagans. Here, again, Paley's only possible evasion is to say, that while the rule and command do not exist in the form of a revealed theology, the Pagans have them in the teachings of natural religion. He would remind us how the Apostle says: "The heathen which have not the law are a law unto themselves." But I reply: If there are no authoritative intuitions given by God to man's soul, then natural theology has no basis. And especially, if the soul of man contains no trace of the image of God in the intuitive distinctions of conscience, then we have no sufficient argument from natural reason to show that God is a moral being, and that He wills us to perform moral acts. A review of the reasonings of natural theology will evince this. The evasion, then, fails, and the fatal objection stands, that, upon Palev's scheme, there would be no virtue whatever for any heathen, however intelligent.

The final and crowning refutation appears, when we attempt to apply this theory to God. His virtue,

surely, is the most complete and exact of all. It is equally sure that His virtue ought to be the lofty model of ours. But in what can the virtue of God consist, according to Palev's definition? There is no rule: for there is no Creator and sovereign over God, to point out to Him what it behooves Him to do. There is no moral obligation; for there is no other whose command can apply a forcible motive to absolute Omnipotence. There is no motive; for His everlasting happiness is eternally, immutably, and necessarily perfect. The only possible escape from these monstrous conclusions is to say, that the rule, obligation, and motive exist, for God, in the moral perfections of His own eternal and unchangeable nature. This is true; a glorious truth; the foundation-stone of all the virtue and happiness in the Universe. But to say this, is to repudiate the central principles of the Sensualistic ethics, and to teach the eternity of the intrinsic moral distinction, in its most decisive form. Could any exposure be more complete than this, which shows us Paley stripping God, the infinitely perfect fountain and exemplar of all virtue, of the very possibility of virtue?

Dr. Adam Smith, the celebrated author of the "Wealth of Nations," attempted, in his Theory of the Moral Sentiments, to explain them as modifications of the emotion of sympathy. He proceeds, after illustrating, in an ingenious and instructive way, the nature of this powerful emotion, after substantially this fashion: When we contemplate the action of a fellow-man, we unavoidably conceive to ourselves the nature of the affections which, as we suppose, moved him to the act. If we feel ourselves in a state of instinctive sympathy with his affections as expressed in the act, we experience a pleasure in this sympathetic harmony; and it is this pleasurable feeling which has received the name of moral approbation. Disapprobation, and the hotter

sentiment of indignation at wrong, are accounted for in a similar way, as results of a lack of sympathy with the agent's affections. Our sentiments of good conscience and remorse towards our own actions, he supposes to be produced thus. When we act, we imagine an ideal man looking on as spectator of our action; and as we conceive him in a state of sympathetic harmony with our motive, or out of it, we are, by the same power of sympathy, affected with self-approbation or remorse.

The fundamental defect of this analysis is, that Smith is compelled tacitly to take for granted the existence of the moral sentiment, in order to account for it. Sympathy only reproduces a fainter shade of the same emotion which we are beholding. It is the secondary rainbow in the soul, reflecting the same tints which appear in the primary. Hence, unless the producing sentiment in the agent were moral, it could not produce by sympathy a moral sentiment. This may be tested by a very simple instance. Two malignant minds may be in full harmony in their thirst for revenge; so that when the one uses his opportunity to wreak his malice upon his enemy, the other may be vividly affected by sympathetic imagination of the expected time when he shall do the same to his enemy. But this is not moral approbation: the conscience of each may be uttering its protest against the crime at the moment, and a similar remorse may pursue both the agents afterward. Again: the sentiments of conscience are supposed to arise by means of an ideal spectator. But by what law does our mind determine the nature of the sentiment in this ideal man inspecting our action? His sentiment is but the projection of our own moral sentiment. Dr. Smith has taken the effect for the cause. Thus, in each step, he has to assume the affection as already produced, for the production of which he would account. Last: the sympathetic affection is always fainter than the one

which awakens it. But our moral sentiments toward our own actions and deserts are far the most vivid. Remorse is more pungent than disapprobation for another: self-approbation is sweeter than our pleasure in others' virtues. But according to Dr. Smith's analysis, the sentiments of conscience, being reflected once and again before they take this form, should be found far the faintest of all our moral sentiments.

The ethical lectures of Dr. Thomas Brown, of Edinburgh, are marked by great acuteness, and nobility of general tone; and he has rendered gallant service in refuting the more degrading theory. He makes moral distinctions original and authoritative, and yet allows the reason only a secondary function in them. The whole result of his analysis is this: When certain actions are presented, there arises immediately an instinctive and peculiar emotion called, for want of a more vivid term, moral approbation. It comes without any previous condition of self-calculation, judgment of relation, or rational perception. This immediate emotion constitutes our whole feeling of the rightness, obligation, and merit of the agent. As memory recollects from experience the successive acts which affect us with the moral emotion, reason generalizes them into a class, and thus derivatively forms the general idea of virtue. Man's moral faculty is, then, according to Dr. Brown, not rational, but emotional: not a proper faculty, but a sensibility. His system deserves, even more than Dr. Adam Smith's, which he refutes, to be called "a sentimental system."

But it does not seem to me a valid objection to it to say, with Jouffroy, that Dr. Brown makes the moral emotion only a coordinate one among the ranks of our instinctive affections; and so there is no longer any more reason why the moral sentiment should claim to be dominant over them, than they over it. For Dr.

Brown might reply, that the very nature of this moral sentiment is, that it claims all the other sensibilities which can have any moral results as subject to its imperative, and thus within its domain. A more valid argument might be drawn from this peculiar, imperative feature of our moral sentiments. This feature certainly makes it the regulative faculty of the human soul. If our moral sentiments are rooted in an instinctive sensibility, and not in a judgment of the reason, then man is not practically a rational being. Reason does not rule him when he acts rightly even.

But, second, Dr. Brown's scheme does not square with the analogies of the soul. In every case, our rational emotions arise out of our intellections. true, in a lower sense, even of our animal instincts: it is perception which awakens appetites. It is the conception of the intent to injure which gives the signal to our resentment. And in all the more intellectual emotions, as of taste, love, moral complacency, the view of the understanding, and that alone, evokes the emotion in a normal way. The soul feels because it has seen. and as it has seen. How else could reason rule our emotions? Surely this is one of our prime distinctions from brutes, that our emotions are not mere instincts. but rational emotions. We may note especially, too, that if our moral sentiments did not have an element of rational judgment at their root, it would be inexplicable that they do not, like all our other instinctive affections, sometimes come into collision with our own reason. Again: Dr. Brown has very properly shown, in opposing the selfish system, that our instincts, because instinctive, cannot originate in calculated selfinterest. He seems to think that in making the moral emotion an instinctive sensibility, he has done all that is needed to make it morally disinterested. But because an act is not selfishly calculated, it is not therefore disinterested. Then would our animal appetites,

even in infancy, be moral virtues! The truth is, as Jouffroy has taught us to distinguish: in instinctive volitions, the motive is personal to the agent, but not consciously so. In selfish volitions, the motive is personal to the agent, and consciously so. Only when the motive is impersonal to the agent, and he knows it, and yet acts, is there disinterested virtue.

Lastly: If Dr. Brown's theory were correct, moral good would only be relative to each man's sensibility, and there would be no uniform standard. An act might be good to one and bad to another, as it presented itself to his sensibility; just as one man calls a viand good, and another, bad. But the truth is, that moral distinctions are as intrinsic in certain acts, as truth is in certain propositions; both are eternal and immutable. Even God sees and calls the right right because it is so. Dr. Brown foresees this, and in endeavoring to rebut it, is guilty of a mischievous absurdity. Why, he asks, does it give any more intrinsic basis for moral distinctions in acts themselves, to suppose that our cognizance of them is by a rational judgment, than to say, with him, that it is in the way they immediately affect a certain natural sensibility in us? What is intuition, he asks, but a sort of rational sensibility to be affected in a given way by propositions? And in either case we have no ground for any belief in the permanence of the quality felt or perceived, than that our Maker has made us to be affected so! Thus he betrays the whole basis of morals and truth to a sweeping scepticism. We are compelled by our reason to believe, on the contrary, that certain propositions affect us with such and such judgments, because truth or error is intrinsic in them. Dr. Brown goes to the fatal extreme of saying that the permanent relations ascertained by the reason itself are not intrinsic in objects, and exist nowhere except in the perceiving reason. Says he: Were there nowhere a perceiving mind cognizing the relation of the square of the hypothenuse to the squares of the two shorter sides, the relation would be absolutely non-existent, though the universe might be full of right-angled triangles. Is not this sheer scepticism? Is it not teaching that none of the convictions of the reason have objective validity? There need be no stronger refutation of his theory, than that he should acknowledge himself driven by it to such an admission. The moral functions of the soul have, indeed, an emotive element; but this is the attendant and consequence of a rational element.

Our moral judgments, then, as we have indicated frequently in the previous discussion, are evidently no other than functions of the reason. This is evinced by the remarks just made in refutation of Dr. Brown's sentimental system. In this judgment of the reason is rooted that peculiar emotion, which gives temperature to all our moral sentiments. Now it might perhaps be said plausibly, that the reason is concerned only with the judgment of truths in propositions; and we are not willing to accept that analysis of virtue by Dr. Clarke into fitness, and of Wollaston, which reduces the moral distinction to that of mere truth. But truth in propositions is a certain kind of relation between subject and predicate; there are other kinds, and the proper function of the reason is the judgment of all relations. Reason is the comparing faculty. I confirm the doctrine that our moral judgments, so far as they are merely intellective of the distinction between right and wrong, are simply acts of the reason, by these other remarks. First: So far as we know, those beings who have reason, and those only, form moral judgments. The cause that brutes have no moral ideas, is, that they cannot reason on abstract truth. Second: If the moral faculty and the reason were two faculties, we might naturally expect that the one would sometimes convict the other of inaccuracy as the memory does the reason, and as

observation does the memory. Third: The identity of the two functions seems strongly indicated by the fact that, if the reason is misled by any error of views, the moral judgments are infallibly perverted to just the same extent. The moral motive is always a rational one. The imperative of conscience, the judgment of approbation or disapprobation, merit or demerit, are always grounded in the truth of some proposition predicating relation of agent and object. By that truth essentially these judgments are mediated. I see no necessity, therefore, to assign our moral acts to a special and distinct faculty of internal perception, or "moral sense." They are functions of that crowning faculty which allies man to his Maker, the Reason.

We have now passed in review all the several theories which attempt to resolve the moral sentiments of man into some lower faculty, and have found them untenable. Hence alone we draw a sufficient demonstration, that they are original and intuitive. All the chemists, for instance, attempt to analyze a new solid into some known simple substance, and absolutely fail. We, therefore, set it down as itself belonging to the list of simple and original substances. But this is not the whole of our proof. For every original and simple idea or notion with which our souls are furnished, we find a distinct, original power; and without this, the cognition could never have been possessed by man. Had man no eye, he would never have had the ideas of light and colors; no ear, he could never have had the idea of melody or harmony; no taste, he would forever have lacked the idea of beauty. So, if the notion of rightness in actions is not identical with that of selfish advantage, nor common utility, nor benevolence, nor love of applause, nor taste, nor sympathetic harmony, nor any other original sentiment, it must be gained directly by some other original power of the soul. To this, in the second place, consciousness testi-

fies: the man who fully and calmly investigates his own mental states and acts will be convinced that his view and feeling of the rightness of some acts arise immediately in his mind, without any other medium than intellection of the relations of agent to object; that when the attention is awake, their rise is unavoidable; and that their failure to arise would be necessarily apprehended as a vice in the soul's actings. There is, indeed, great diversity in the estimation of the more complex details of moral questions. And men's understanding of these distinctions is often disturbed by three causes, well stated by Dr. Brown: complexity of elements, habits of association of ideas, and prevalent passion. But allowing for these, there is just that immediate and universal agreement in all sane human minds which we expect to find in the acceptance of necessary first truths. In the simple and fundamental ideas of morals, all men are agreed. Savages of all continents, for instance, think as we Christians do, on the simple questions, whether gratitude be criminal, whether virtuous acts deserve penalty, whether beneficence is meritorious. In the case of any other intuitions, we have to make precisely the same allowances, and to expect the same disturbing causes, as in the moral.

These important truths may be happily illustrated from our logical judgments. In some propositions [not in all: some are truisms, many are meaningless, and many are so unknown as to be neither affirmed nor denied] there is the element of truth or falsehood, simple, original, incapable of analysis into, or definition by, simpler terms, and immediately cognized by the mind's intellection: So, there is in some actions (of the class known as "moral") an intrinsic quality of rightness or wrongness, equally simple, original, and incapable of analysis, seen immediately, like primitive truth, by the inspection of the reason. This quality in these acts is intrinsic. We see it not merely because our souls hap-

pen to be so fashioned as to see it: but a truthful and perfect Creator has so fashioned our powers as to see it, because it is intrinsically there, in the right acts. But it is not asserted that all moral distinctions in particular acts are immediately or necessarily seen. propositions, some have primary, and some deductive truth, some seen to be true without premises, and some by the help of premises; so in acts having moral quality, the rightness or wrongness of some is seen immediately, and of some deductively. In the latter, the moral relation of the agent is not immediately comprehended, but the moral judgment needs to be mediated only by the knowledge of some other truths. If these truths are not known, then the moral quality of the action is not obvious. This simple view shows us whv. if the mind's opinions touching those truths which are the premises of moral judgments are erroneous, the moral judgment also errs. Just as in logic, so here: false premises used according to the correct forms of deduction, must lead to false conclusions. And here is the explanation of the discrepancies in moral judgments which have so confused practical ethics, and have given the pretext to the Sensualistic philosopher.

The promise of my fourth chapter has now been fulfilled. Let this part of the discussion be closed with two inferences. The corner-stone of the Sensualistic philosophy is upturned by the establishment of the doctrine, that man's soul does possess primitive rational judgments of right and wrong. For here is one instance, one whole class of mental functions, existing in the teeth of the fundamental assertion of the Sensualist, that sense furnishes all our mental stores; and the instance is of transcendent importance. The Sensualist, losing his battle at this point, has lost it totally; for the moral functions of the soul are regulative of all the others. Second: The decision of this question is virtually decisive against all the worse consequences of

the Sensualistic scheme-evolutionism, materialism. and atheism. Let any man apprehend the solemn and unique fact of his own rational, responsible spontaneity, as it has been established in this chapter; let him look it in the face until he perceives its true significance, and he will relinquish these errors as self-evident absurdities. No matter, no organism of molecules, no mere organ of animal sensibility, can be the seat of this glorious and awful faculty. It stands above and apart from all these lower forms of being. That substance which is qualified by this power must be as unique as its peculiar endowment. And to assert its evolution by the operation of unintelligent law, out of lower forms of animal or inanimate matter, is as wild as to assert the rise of a universe out of nothing without a First Cause. Soul and God are revealed together in this otherwise inexplicable fact of responsible, intelligent free-agency.

CHAPTER XIII.

PHILOSOPHY AND THE SUPERNATURAL.

TF man has a soul, a God, and a hereafter, and is a fallen being, then, indisputably, every good man must deem the bearings of any code of speculative opinions upon the doctrine of Christian Redemption as unspeakably its most important aspect. For it is impossible for any professed humanitarianism to advance any praiseworthy purpose or motive whatsoever, assuming to tend to the well-being or elevation of our race, but that I will show, if man is to have any future. that motive is bound to urge the well-wisher to seek his fellow-creatures' future good, as much more earnestly. as immortality is longer than mortal life. But has the Sensualistic philosophy any proposal to offer for redeeming men from a disordered and mortal estate, as plausible or promising as Christianity? Unless it has. a mere decent regard for humanity should prevent all disrespect to this doctrine, from which, it is manifest, the larger part of all the virtue, hope, and happiness in a miserable world now spring. I freely declare, therefore, not as a clergyman, but as a human being not simply malignant toward my suffering race, that my main impeachment of the Sensualistic philosophy, and especially of the Positivist and Evolution doctrines, in which it now chiefly appears, is grounded upon their anti-Christian tendencies. I have pointed to that gulf of the blackness of darkness, and of freezing despair. toward which they thrust the human soul; a gulf with-

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out an immortality, without a God, without a faith. without a Providence, without a hope. Were it not both impossible and immoral for a good man to consider such a thing dispassionately, it would appear to him odd and ludicrous to witness the pretended surprise and anger of the assailants at perceiving, that reasonable Christian people are not disposed to submit with indifference to all this havoc. There is a great affectation of philosophic calmness and impartiality. They are quite scandalized to find that Christians cannot be as cool as themselves, while all our infinite and priceless hopes for both worlds are dissected away under their philosophic scalpel. Such bigotry is very naughty in their eyes! This conduct sets Christianity in a very sorry light beside the fearless and placid love of truth displayed by the apostles of science! Such is the absurd and insolent tone affected by them. J. S. Mill coolly argues, that, of course, the clergy are wholly unfitted for any pursuit of philosophy, because they are bound beforehand by their subscription to creeds, which have taken away their liberty of thought in advance; and it is quietly intimated that mercenary regard for salaries and dignities dependent on that subscription, will prevent their accepting or professing the Sensualistic gospel. To this arrogance and injustice I, for one, give place by subjection, not for a moment. It is a composition of hypocrisy and folly. For we observe that whenever these philosophic hearts are not encased in a triple shield of supercilious arrogance. they also burn with a scientific bigotry, worthy of a Dominic or a Philip II. of Spain. They also can vituperate and scold, and actually excel the bad manners of the theologians! The scientific bigots are fiercer than the theological, besides being the aggressors! If we were about to enter upon an Arctic winter in Labrador, with a dependent and cherished family to protect from that savage clime, and if "a philosopher"

should insist, in the "pure love of science," upon extinguishing by his experiments all the lamps which were to give us light, warmth, and food, and to save us from a frightful death; and if he should call us testy blockheads because we did not witness these experiments with equanimity, I surmise that nothing but compassion for his manifest lunacy would prevent sensible people from breaking his head before his enormous folly was completed. When a wilful, absurd person chooses to dignify his novel (or stale) vagaries, which contradict not only my most serious and honest judgment, but that of the best and wisest of human kind, with the reverend names of "Truth" and "Science." I submit that I have at least as much right to reject them as no truth and no science, as he has to advance them. Let us suppose a case perfectly parallel. I had an honored father, whose virtue, nobleness, and benevolence were the blessing of my life. That exalted character and all that beneficence were grounded in certain professed principles. Now, I know that father; I know. by their fruits, that his principles were noble. But here come a parcel of men who did not choose to become acquainted with him, and so really do not knowhis memory, and they indulge their vanity, or some other caprice, in disparaging his person and principles. But they expect me, his son and beneficiary, to "take it all coolly!" It is quite naughty to have any heat toward gentlemen who are proceeding so purely "in the interests of the Truth!" Now, every right heart knows that it is not only my right, but my sacred duty o defend the sacred character of my father and benefactor with zeal and righteous emotion. If I were capable of really feeling the nonchalance which his gratuitous assailants profess, I should be a scoundrel. There is no righteous room for neutrality or indifference of soul when righteousness is assaulted. It is impossible for man to love truth and right as it is our duty to love it

without having sensibility when they are injured! Such is precisely the relation of the honest-minded Christian when his God and Saviour is disparaged! If men choose to exercise their right of free discussion by waging this warfare on our God and His cause, they need not expect anything except the resistance of honest indignation; it is a piece of hypocrisy as shabby as shallow to pretend to a right to outrage other people's dearest convictions without the provocation of their disapproval. We shall, of course, give them the full privilege of doing this wrong untouched of civil pains and penalties: this is the liberty of thought which Prot estantism asserts, to its immortal honor. God forbid that any sinful abuse of the truth should ever provoke any Christian to infringe that liberty by persecution. And it is plainly our duty, under the bitterest provocation of these gratuitous assaults upon the most precious principles, to see to it that we "be angry and sin not;" that our indignation may not go farther than the evil desert, and our condemnation may contain none of the gall of personal spite.

But there is an affectation abroad, among the assailants of Christianity, which demands far more. claims the privilege of speculating as unchristianly as they please, not only without being molested, which we freely concede, but without being disapproved. They say that the very emotion of disapprobation is a persecution; that this zeal is precisely the motive which, in more bloody days, prompted churchmen to visit civil pains and penalties upon dissentients; that this motive will do the same thing again, upon opportunity, if it be allowed to exist; and that, therefore, we are not true friends of liberty of thought until the very emotion is banished, and all speculation, no matter what holy and righteous thing it may assail, is considered without feeling and weighed with the absolute impartiality and initial indifference which they affect.

Upon this claim my first remark is, that it is violently inconsistent. With these men, this license of thought is a holy thing (possibly their only one.) And when they imagine it assailed, or in the least restrained, do they entertain the question of the restriction with that dispassionate calmness? Not at all: they are full of an ardent zeal; and they believe that they "do well to be angry." They can argue the cause of charity most uncharitably, and can be most intolerant in their advocacy of toleration. Why? Because the encroachment is unrighteous. Aha! Then we have the sanction of the nonchalant gentlemen for the truth, that righteousness ought to be not only professed, but loved; that moral truth and right are the proper object, not only of judgment, but of moral emotion. They have found out that it is good to be "zealously affected" in a good cause! This is precisely my doctrine, provided only one is entitled to be sure that the cause is good. My second answer is: That this species of indifferentism is unnatural and impossible. Man's soul is formed by its Maker not only to see moral truth, but to love it upon seeing it. It is an unnatural soul, a psychological monstrosity, which does not. But love for that which is reasonably valued must have its counterpart emotion toward the opposite. One might as well demand to have a material mass with a top, but no under-side; or a magnet with a North pole to it, but no South, as a reasonable soul which loved the right (as it ought) and yet did not hate the wrong. Last: I argue, that such a state of soul would be criminal, if it were possible. Such moral neutrality would be intrinsic vice. In order to be capable of it, man must be recreant to the positive claims of virtue. If I find a man who is really able to hear the question debated, whether Jesus Christ was an impostor, with the same calmness, the same utter absence of emotion with which he would properly debate the species in botany to which a certain weed should be re-

ferred, I shall be very loath to trust my neck or my purse with that man in the dark. The demand for this actual indifferentism as essential to true liberty of thought and philosophic temper, is absurd; it is impossible it should exist. The speculative world needs to be reminded again of that doctrine of liberty of thought which Bible Protestantism enounced when she bestowed that boon on mankind (for it was nobody's gift but hers.) That men are responsible for their opinions, but responsible not to society, but to God: that charity for evil and error is a universal duty; but the object toward which we are to exercise it is the person and not the error of the misleading fellow-creature. Charity had its incarnation in Him, who shed His tears and His blood for the persons of the Scribes, while He denounced their principles with inexorable severity.

Obviously, then, we do not think with J. S. Mill, that clergymen are necessarily excluded from the pursuit of philosophy because they are committed in advance against that temper of indifferentism by subscription to their creeds. For, first, it is too late in the day to assume that the total absence of fixed convictions, even on the most fundamental and admitted truths, is a necessary qualification for the pursuit of truth. This would imply, after so many generations of pursuit, that truth is in fact a phantom, never to be attained at all: and what conviction could be so adverse to the honest pursuit of her as that? I have not so poor an opinion of philosophy as to believe that the sole architecture of it must ever consist in the upturning and relaying of the foundations. "Je vous avoue, autant le doute en beaucoup de points me pasait sage et forcé, autant le scepticisme general sur la raison et les réalités qu'elle nous découvre, me semble, plus j'y réfléchis, arbitraire, artificiel, et dangereux." (Cousin to Sir W. Hamilton.) Second: It is presumable that the clergyman, when he subscribes the creed of his choice, is already an edu-

cated man, no longer a boy. He has investigated, has ascertained the principles which he adopts, and is entitled to hold them as settled, at least so far as not to surrender them to a new struggle for existence, at the mere bidding of every impugner. Third: The quiet assumption that the clergyman alone, among his fellowcitizens, is devoid of that manliness and honesty which would sacrifice prejudices and emoluments in order to be faithful to truth newly discovered, is offensive. When we consider its significance, and when we remember the multitude of clergymen who have, in all ages, done this very thing, with a magnanimous and uncalculating courage; when we recall the fact that Christianity alone has furnished actual martyrs to their convictions, we perceive that this insulting intimation betrays a scientific bigotry more vulgar and odious than anything exhibited by ecclesiastical intolerance. Every latitudinarian free-thinker reads us his trite lesson upon the Church persecuting free science, from the text of Galileo and the Romish Inquisition. Well, while thoroughly reprobating the act and the body which authorized it, we can very well afford to accept this as a typical instance. Science has some unjust treatment to complain of; but Science did not present us with a martyr! Her apostle was not inspired by her with that pitch of manhood and fealty to truth! He subscribed falsehood in order to save his own life; and while this morsel of history leaves upon Rome the stigma of invading the inalienable rights of the human mind, it also leaves upon Galileo the dishonor of betraying them. It requires the ennobling power of this Christianity, which Mill so contemns, to make men speak out the truth that is in them, in the face of death, instead of whispering the truth, and speaking out the lie, at the bidding of cowardice. With this representative example set over against the noble army of Christian martyrs, with what justice can it be said that

Christianity obstructs the search and profession of the truth? In fact, it is her liberalizing and elevating spirit which has animated the most original and fruitful researches of modern science.

The most patent signature of error upon the recent godless philosophy is this: that it is arrayed against the rudimental instincts of man as manifested in all ages. That the mind has innate principles of thought, regulative of its own intelligence; that all necessary truth is not inaccessible to it; that a universe does imply a Creator, and that Nature implies the supernatural; that man has consciously a personal will, and that there is a personal will over man's governing him from above: these are truths which all ages have accepted. Now, it is always a safe test of pretended conclusions to ask if they contravene the necessary dictates of the common sense of mankind. If they do, we set them down as false philosophy, whether we can analyze the sophisms and expose them, as we have done with this system, or not. When the Idealist deduces the conclusion that the man who breaks his head against a post has no valid evidence of the reality of the post, or when Spinoza proved that good and evil are in themselves the same, the universal common sense of mankind gave them the lie: we might have safely assumed that a nore correct statement of the elements they discussed would do the same. And so it turned out. So, when the Sensualistic philosophy proposes to omit the supernatural, it is, fortunately, attempting an impossibility. Man is a religious being. Men would have learned this, at least, as certainly as they would have learned the law of gravitation, had they applied that experiential method in which they boast, by a fair induction from the facts of human nature and history. That there is in man's soul an ineradicable principle which demands the supernatural, is as much a fact of natural history as that man is a bimanous animal. His spiritual instincts cannot

but assert themselves in races and in individuals; and even in professed materialists, whenever the hour of their extremity makes them thoroughly in earnest. All that such philosophy can effect is to give sensual minds a pretext for blinding their own understandings and consciences, and perhaps sealing their own perdition, while it affords topic of conceit to serious idlers in their hours of vanity. Rob man of the supernatural, and he must have it again; he must have a religion. If you take from him God's miracles, he will turn to man's miracles. "It is not necessary to go far in time, or wide in space, to see the supernatural of superstition raising itself in the place of the supernatural of religion, and credulity hurrying to meet falsehood half way." The later labors of Cointe himself present an example of this, which is a satire upon his creed sufficiently biting to avenge all the insults Christianity has suffered from it. After beginning with the doctrine that true philosophy necessarily makes religion impossible, he ended with constructing a religion with a priesthood, calendar, and formal ritual, with aggregate humanity as its Great Being. "He changed the glory of the incorruptible God into an image made like unto corruptible man."

Here also it should be said, that it is a falsification of the history of knowledge to each that when true, scientific progress is made, it causes men to relinquish the supernatural for metaphysics, and then this for positive, physical science. It was not so of old; it is not so now; it never will be so, either with races or individuals. The cleric Copernicus, Bacon, Kepler, Sir Isaac Newton, Leibnitz, Cuvier, Brewster, Herschell, did not become less devout believers by reason of their splendid additions to the domain of science. The sixteenth and seventeenth centuries in Europe were marked by a grand intellectual activity in the right direction. It did not become less Christian in its thought; on the

contrary, the most perfect system of religious belief received an equal impulse. The Christian awakening in France, which followed the tragical atheism of the first revolution, and which Sensualism is now striving to quench in the blood of another Reign of Terror, did not signalize a regression of the exact sciences. Human progress is a chequered scene, in which many causes commingle, working across and with each other, incomplete and confused results. Sometimes there is a partial recession of the truth. The tides of thought ebb and flow, swelling from the secret fountains which none but Omniscience can fully measure. But amid all the obscurities, we clearly perceive this general result, that the most devout belief in supernatural verities is, in the main, coincident with healthy intellectual progress.

One objection, which has been made by us already. against the different forms of Sensualism was, that it has no place for the conscious fact of our free-agency. The mind knows that, within certain limits, it has spontaneity; it does originate certain effects. No system, then, is correct, which has not a place for the full and consistent admission of this ultimate truth. But this same truth is enough to convince us that Sensualism is mistaken in excluding the supernatural—as does Positivism and Evolutionism; and in omitting a divine will and Providence. Science with the Positivist is nothing but the knowledge of sensible phenomena and their laws. Nature is the all; no knowledge can be outside the knowledge of her facts and laws; no cause save her forces. The supernatural is to us the inaccessible. Again: Positivism argues; every branch of experiential knowledge, the more it is explored, does the more fully convince us of the universal and invariable uniformity of natural law. Hence, the argument is as when we follow two parallel lines and find that, however far we trace them, they do not approximate, we conclude that

if they could be infinitely extended, they would never meet. So, we are authorized by this widening experience of the invariability of natural laws, so far as we learn them, to conclude, that if our knowledge of all natural law were absolute, we should find it absolutely invariable through all time and space. Once more, the fundamental principle of Positivism, as we saw, is that "it regards all phenomena as subject to invariable laws." The Sensualistic philosophy concurs in this as a fundamental dictum, thus committing the absurdity of seeking in an objective fact (if it is a fact) a regulative subjective law of thought. However, passing by this solecism, we observe that they infer from it that all supernatural facts are necessarily incredible, because the conviction that such a fact had occurred, would fatally dislocate our very laws of thought, as the event itself would dislocate the laws of nature.

This is really the same statement with that of Hume's famous argument against the credibility of miracles, save that the recent unbelievers put it with more boldness and candor. According to Hume, it is experience only which gives authority to human testimony, and it is the same experience which assures us of the uniformity of the laws of nature. When, therefore, these two kinds of experience are contrary, we have nothing to do but to subtract the one from the other, and embrace an opinion either on the one side or the other, with that assurance which arises from the remainder. But according to the principles here explained, this subtraction, with regard to all popular religions, amounts to an entire annihilation; and, therefore, we may establish it as a maxim, that no human testimony can have such force as to prove a miracle, and to make it a just foundation for any such system of religion.

Now there is a sufficient refutation of all this in the familiar fact, that our own wills are, consciously, con-

tinually originating effects of which nature, i. e., physical force, is not the efficient: and that our wills are continually superseding this force to a certain extent. Let us take a most familiar instance, of the like of which the daily experience of every working-man furnishes him with a hundred. The natural law of liquids requires water to seek its own level; requires this only, and always. But the peasant, by the intervention of his own free-agency, originates absolutely the opposite effect; he causes it to ascend from its natural level in the tube of his pump. He adopts the just, empirical, and "positive" method, for tracing this phenomenon to its true cause. He observes that the rise of the water is effected by the movement of a lever; that this lever is not the true cause, for it is moved by his arm; that this arm also is not the true cause, being but a lever of flesh and bone, which is moved by nerves; and finally, that these nervous chords are but conductors of an impulse which, his consciousness assures him, he himself emitted by a function of his spontaneity. As long as the series of phenomena were affections of matter, they did not disclose to him the cause of the water's rise against its own natural law. It was only when he traced the chain back to his own self-originated and spiritual act, that he found the true cause. Here, then, is an actual, experimental phenomenon, which has arisen without. yea, above natural, physical law. According to the Positivist, nature discloses only the forces of matter: this cause was outside of and above matter. It was, upon his scheme (not ours), literally supernatural. Yet that this cause acted, was experimentally certain; certain by the testimony of consciousness. And if its testimony is not experimental and "positive," then no phenomenon in physics is so, even though seen by actual eyesight; because it is impossible that sensation can inform the mind, save through this same consciousness. But now, when this peasant is thus "positively" taught

that his own intelligent will is a fountain of effects outside of, and above, material nature, and when he lifts his eyes to the orderly contrivances and wonderful ingenuity displayed in the works of nature, and sees in these the experimental proofs of the presence of another personal intelligence there, kindred to his own, but immeasurably grander, how can he doubt that this superior mind has also, in its will, another primary source of effects above nature? This is as valid an induction as the physicist ever drew from his maxim, "Like causes, like effects." We thus see it is not true that the "positive," or "experimental method," presents any difficulty in the way of admitting the supernatural. On the contrary, it requires the admission; that is to say, unless we commit the absurdity of denying our own conscious spontaneity. Will it be objected, that the pump also raises the water in virtue of another natural law, that of pneumatic pressure? Just so: the instance is all the better, in that it shows us how a personal will can combine with these natural laws, and produce, by occasion of the natural force, an effect which expresses the intelligent will above nature. It is precisely thus Christianity teaches us God employs His own natural agents. It is thus the supernatural underlies the natural.

The difficulty, indeed, can only have force with an atheist. For if there is a Creator, if He is a personal, intelligent, and voluntary Being, then since it is always possible that He may see a motive in Himself for an unusual intervention in His own possessions, our experience of our own free-agency makes it every way probable that He may intervene on occasion. No rational man, who conducts his own affairs customárily on regular methods, but occasionally by unusual expedients (when he has an adequate motive), can fail to concede a similar free-agency to God, if there is a God. This noted argument against the supernatural is, therefore,

a vicious circle. It excludes a God, because it cannot admit the supernatural; and lo! its only ground for not admitting the supernatural is the denial of a God.

The truth is, that nature necessarily implies the supernatural. Nature herself shows us the marks and proofs that she was not eternal nor self-existent. She had, therefore, an origin in a creation. To deny this is atheism. But what can be more miraculous than a creation? If it were indeed impossible that there should be a miracle, then this nature herself would be non-existent, whose uniformities give the pretext for this denial of the supernatural. Nature tells us that her causes are second causes; they suggest their origin in a First Cause. Just as a river suggests its fountains, so do the laws of Nature, now flowing in so regular a current, command us to ascend to the source who instituted them.

The pretended argument of Hume against the credibility of miracles has received repeated answers, which need not be here repeated. The sophisms of it appear in a more general and, therefore, a more plausible form. in the argument against the possibility of a supernatural effect, which I stated on page 347th. But all their plausibility is removed by the following truths. . Man's reliance on testimony is not the result of experience. but is limited and corrected by experience. The child believes the testimony of his parent before he has experimented upon it: believes it by an instinct of his reason. How poor, how beggarly, then, is the arithmetic which proposes to strike a balance between the weight of our experiences for the Christian testimony and our experience of the uniformities of nature! Problems of moral thought are not to be thus dispatched, like a grocer's traffic! On this species of logic it would be impossible for me to believe the Naturalist, whose character I most revered, and whose word I most honored, when he told me of the grand endogenous trees of the tropics: for I have seen many hundreds of thousands of trees, for myself; and every single one was an exogen. Ah, says our modern philosopher, but there is nothing incredible à priori in Nature's producing endogens in the tropics. I reply, first: There is no more unlikelihood that a personal God should intervene, if He see: fit, in His own affairs, in a manner unusual to my narrow observation: And second: That my instance has revealed the bald petitio principii in the pretended argument; for it now turns out that the incredibility of the supernatural is held by our opponents to be à priori, and not a consequence of this worthless balancing of experiences.

The second truth bearing on the case is (one already illustrated), that no uniformity of experience concerning a given sequence can demonstrate its necessity. It suggests only a probability. None should know this so well as the physicist, for it is his business to understand the nature of demonstrative induction. [See page 277.] If then, Reason, from any other source of her teachings, suggests that the acting cause may have been superseded by another adequate cause, she regards a new and unusual effect as entirely possible, although she had before only witnessed the recurrence of the other, and that with unbroken regularity. That possible other cause, reason does recognize in a sovereign God. For,

Third: the experiential is not the only source of our valid judgments. How often is this impregnable fact to be forgotten? The reason has its constitutive powers, which, when the suitable occasion arises, give us their truths over and above our objective experience. Hence it is, by the most rigid conclusion, demonstrated that an asserted truth is not incredible, simply because it lies outside our whole experience. In view of these three remarks, it is obvious that the universal observation of a perfect regularity in the action of second

causes is inadequate to prove that the unusual action of a First Cause is incredible. For illustration, by precisely this logic, every new and unexpected effect of natural powers must also have been absolutely incredible. "Universal human experience" did not contain a particle of ground for the assertion of such a new effect. The effect of gunpowder must have been absolutely incredible. That ships should be propelled without sails and oars must have been absolutely incredible. That a message should be instantaneously communicated, and that without writing, must have been absolutely incredible. But multitudes of people believed in cannons, steamships, and magnetic telegraphs, without experience, on mere testimony. Did they proceed unreasonably?

Fourth: The premise of this boastful argument claims that universal observation shows us natural law working always and everywhere uniformly. This is not a correct statement of the fact. Not repeating the exception, that the reason compels us to refer nature itself to a supernatural creation, I remind the unbeliever, that there is an existing testimony to frequent unusual effects above nature, in the past experience of man. There was a time when water did not "run down hill," to wit: while Joshua was crossing the Jordan. There was a time when death did not retain his natural power over the corpse, namely: on the morning of the first Christian Lord's day. But that is the Christian testimony, the credibility of which is the thing in debate? Just so; and therefore the disputant shall not be allowed to assume its falsehood in his premise: the logical task he undertook was, to prove its falsehood in his conclusion. It is also worthy of mention here, that some of these supernatural effects are also attested by heathen testimony. But the assumption is false again, in overlooking another exception: the rise of every independent species in palæontology is an observed and

experimental instance of supernatural power. Nature has no regular, ordinary power of producing new species; yet the rise of many such is experimentally cer-Retrenching these assumptions, then, all that experience authorizes us to assert is that nature acts uniformly according to the laws of second causes, in the present age of the world, and within the limited compass of our competent observation. But that compass is a mere patch, compared with the whole universe. Let not the physicist now mislead himself by telling us of his telescope, which has made him acquainted with the laws of the planetary and sidereal heavens. About the stars he has found out a few things. while myriads of things which may be going on within or upon them, are totally unknown. He thinks he knows very certainly that the planet Jupiter and his moons regularly obey the same law of orbitual motion with the earth. Well. But was the astronomer on that planet able to detect any sign, by his telescope, upon the face of our little planet, on that morning when Christ burst the bands of death in the garden near lerusalem? Of the vastly larger part of the events now occurring in the universe we know nothing, and we are therefore not entitled by our experience to say whether they are all arising naturally, or some supernaturally. The imagination is overweening.

Fifth: An exaggerated use is made of the conception sometimes heedlessly given of supernatural effects, as "violating natural laws," "reversing natural laws," or "suspending natural laws." Hence the recent philosopher concludes, that the supernatural effect would be, somehow, irreconcilable with the regular system of nature. He speaks of it as what would necessarily "disorder" or "dislocate" nature; and he appeals to human experience and scientific observation to say whether any signs of such dislocation anywhere remain. Now, in fact, in the sense of the objector, no supernatu-

ral effect which a wise Creator and providential Ruler would work, is a violation, or a reversal, or even a suspension of natural laws. It is simply a new effect wholly above the power of natural second causes. It is a part of the consistent, all-wise plan of Him who made, and is now steadily ruling. His universe according to His eternal purpose. It makes no dislocation, no jar even, in the machinery of nature. Let us take any instance of such an effect, as described in the Christian Scriptures. If their testimony is true, there was a human body supernaturally produced in the case of Jesus of Nazareth. Well, that body was nourished, grew, lived, and moved just as naturally as any other that came by ordinary generation. There was also a human soul miraculously produced, which possessed superhuman endowments of holiness and wisdom. But even this spirit was not, in its functions and progress, contra-natural; these were only nature assisted and rendered more normal. This holy soul acquired knowledge, and acted, and thought, precisely according to the laws of man's rational nature. as reinstated and rendered in the best sense natural. the house of Jairus there was a youthful form miraculously delivered from the hand of death. But from the moment Jesus delivered the reanimated girl to her parents, she ate natural food and resumed the natural functions of life just as fully as other children. In Jairus' family there was no more dislocations of regular routine than if the sick girl had been healed by natural means. These instances disclose the simple truth. God's miracles cohere perfectly with God's providence in ordinary, natural things, because both are the works of the same wise hand. The first miracle was creation. We saw that the thing produced by every creation must have been just as natural in structure as what afterward arose from nature. Everything, when created, passed promptly and smoothly under the designed domain of natural law. Obviously, then, it is just as unwarrantable to think of a subsequent effect as "dislocating nature," as it would be to imagine any outrage of nature in those first creative acts which gave Nature her normal sway. The Book of Job tells us that, when God laid the corner-stone of the earth, "the morning-stars sang together, and all the sons of God shouted for joy." According to the modern philosophy, instead of seeing in another supernatural act a theme of rational praise, they should have had their reason dislocated and their thinking confounded. The miraculous is, then, an effect which is, in one aspect, i. e., in the cause of its rise above nature, and yet is, in its own essence, conformed to nature. It neither dislocates the understanding nor the orderly working of Providence; yet, if verified, it attests the presence of God.

Once more, all these objections to the credibility of the supernatural imply the assumption, that the present system of nature is the complete and normal one. If it is not, if disorder has anyhow entered, and if there is a personal God over nature, then it is every way credible that He will intervene to correct existing evils, and to reform the erroneous workings. This is so obvious. that the advocates of the anti-supernatural uniformly ignore the truth that nature is evidently in a disordered state. They always speak as though it were in its normal state. They leave out the fall of man, by which "the creation was made subject to vanity;" and shut their eyes to all the symptoms of its "groaning and travailing in pain until now." But this no consistent philosophy can do. I showed in the last chapter, the rudimental fact, that man's disposition and his reason are universally and obstinately at war. Here we found a fundamental dislocation indeed, in the very constitution of man's soul, which it was impossible to refer to the constructive power of the infinite reason; we were compelled to ascribe it to some fatal abuse of spontaneity in the creature. And here we find the clue to explain the manifest disorders in material nature. Which, now, is the more rational expectation: That the all-Wise Maker will leave the work of His hand a prey to the disorder, to obey the perverted and disordered laws of a nature that is marred? Or, that He hath subjected the creation to vanity "in hope," with the purpose of intervening at suitable times to retrieve that beneficent purpose which guided Him in the world's production? The answer will be easy to the unsophisticated mind: If nature has a Master, and nature is not what she ought to be, we may expect her Master to interpose for her amendment.

This supposed difficulty in the admission of the supernatural is thoughtlessly echoed by some who profess to be friends to religion. They have not considered (what the instincts of the objectors have taught them) that the objection is virtually against the possibility of all religion. There is, in fact, no religion worth the name, without the supernatural. God Himself is supernatural. Revelation is a supernatural event in the sphere of thought. Christ's person was supernatural, as truly as His miracles and resurrection. Since man's nature is ruined, and this is what originates the necessity, redemption must be supernatural, in some sort; this is so obvious as to be almost a truism. The events which are to close the history of each soul, and of the world, will be supernatural. When men give up this feature, then, they give up, not merely one species of the evidence for the truth of the Gospel, but the very possibility of any religion: they are virtual atheists.

There is one more head of argument to be unfolded, of transcendent breadth and force, by which sound philosophy proves that nature is actually grounded in the supernatural, not only for her origin, but her present subsistence. The first premise of it is found in the doctrine of providence. It is with strange emotions that I ask the question. Whether it is necessary to

establish this premise before using it? Do I write in a Christian age and country; and must I still argue the truth admitted by all thoughtful Pagans: that there is a rational and moral order impressed upon the affairs of this world? Is it still needful to argue this truth, upon which the whole logic of Bp. Butler's Analogy is founded; which is implied in every fear and throe of remorse in sinner's hearts: which is read in the connection of all kinds of events in all sciences, by proofs as empirical and "positive" as those which support the existence of heat or electricity? There is a providential will above us which combines with all the laws of seccond causes in some way. Now, whatever theory we may hold concerning the mode in which this superior intelligence enters into the effects of second causes; whether we hold the preëstablished harmony of Leibnitz, or the scholastic theory of Aquinas, Jonathan Edwards, and Dugald Stewart, that the first Cause is really the only efficient, and that second causes are but the forms or methods of His ordinary acting; or the more rational theory of the Duke of Argyle (Reign of Law); or whether we refrain from all theories of explanation; that providential will is the supernatural. It is above nature, in that it governs her. It is above nature, in that it exerts other powers than merely those of second causes, in guiding, if not in moving. And it is a present cause. It "surrounds our down-sitting and our uprising, and 's acquainted with all our ways." It teaches us that Nature only exists by reason of the supernatural.

I will not go into the metaphysics by which the two older hypotheses as to God's relations to second causes were supported and refuted. That of Leibnitz probably has no serious advocate in our day: that of the Thomists will certainly not be advocated by the Sensualistic philosopher, seeing it is more destructive to his system than even the true one. For in making God

the real Efficient in every act of His ordinary providence, it really makes second causes mere simulacra of powers, mere masks behind which God ordinarily hides His present hand; and it answers the denial of the supernatural, by making all nature's work such. Whereas the anti-Christian philosopher seeks to push God out of nature, this scheme answers by pushing nature aside and placing her whole powers in God's hand.

The ascertained truth from which we start, then, is this: That there is a present controlling providence of the First Cause over all Second Causes. The problem is: How does it combine with them? This question raises another: What are Second Causes? Now let us be content here, again, with the philosophy of common sense, which regards dependent beings as possessing a true being and permanency. Each essential property of things is a power in posse, or the potency of an actual second cause. But, in order that one of these potential properties may become cause, or exert power, a certain relation must be established between the thing or being it inhabits, and the other being which is to receive the effect. Each effect is, then, in reality, the result of the action or counteraction of more than one power. That is to say: Cause is always complex. A natural power exists while it is not acting; its passage from passivity to activity is simply its release from some counter-action of another power. The providence, then, consists in the secret combinations and regulations of this counter-action. Hence, it not only allows, but requires, the permanency, the uniformity, and the reality of the natural powers in the second causes. It is because these continue, that this rational providence is able to use Nature in such a way as to effectuate, through her, special functions showing final causes. Let us consider, for example, a special and familiar case of a personal providence, pursuing such a special function: that of the clock-maker. There are two mechanical laws of which he chiefly avails himself. One is. that the gravity of a mass of lead suspended freely, will give him a constant motive power, of a certain force. The other is, that a pendulum having the length of thirty-nine and a certain fraction of inches, will swing, when thrust aside, in beats of one second. By bringing the force of his dependent weight to bear, through an escapement, upon the side of his pendulum, he produces this regular and designed result. His weight does not accelerate its motion in descending as it otherwise would: and his pendulum does not become quiescent from friction and atmospheric resistance, as it otherwise would. The result is, the special function of a time-This function can be regulated, arrested, or changed, at the will of the maker; the clock can be made to keep sidereal or solar time, true or false. Now, it is to be noticed that the maker does not effect this control through any infringing of the two natural laws he uses; but by not infringing them. The providential result is not obtained by virtue of any irregularity of the two laws, but by virtue of their invariable regularity. It is precisely because the law of gravity expressing itself in the traction of the dependent mass of lead, and in the changeless beat of the second's pendulum, is absolutely regular, that he is able to carry out his purpose, and to establish the special function. It is this regularity of natural law which enables him to vary the working of his clock at will.

Thus, yet in a manner never fully revealed to us, the Almighty Providence employs the powers which reside in created things, to effectuate all His special purposes. The fact that no regular law is infringed does not imply that His superintendence is excluded: it is by means of that very regularity that He works. He guides with His skillful but invisible hand to just those combinations which release the powers of the second causes He needs for His purpose, and reduce to potentiality

those whose tasks are for the time completed. It is thus that perpetual providence enters, which we are compelled to grant, as much by the nature of created things and the requirements of our own reason, as by the testimony of Scripture. But when once we learn this great truth, that all the natural reposes immediately upon the unseen supernatural, our difficulty is at an end, in admitting the credible testimony to the occurrence of visible miracles, at a ned is vindice dignus.

We have now reached a point where it becomes easy to refute the frivolous objection against the possibility of an answer to prayer from the stability of nature. That objection sets out by assuming the absolute and universal regularity of natural laws. No effect is to be looked for save from and through them, says the caviller. But every effect is already potentially in its causes: they existing, it is as impossible that the effect can be arrested as that the actual past can be recalled. For instance: a company of people in a ship are informed by the captain that the vessel cannot live in so rough a sea more than six hours longer. Thereupon the Christians present persuade the frightened passengers to pray for an earlier change of weather; and if it happens to come, and they survive to tell the story, they cease not to boast in the case as a manifest and specific answer to prayer. But, says the caviller, this is all superstition. That tempestuous sea was the regular physical effect of meteorologic causes already established, and existing over the ocean, which, in turn, were connected with other movements, past and present, embracing our whole globe, and were the inevitable results of other movements now in the irrevocable past. Hence the continuance or cessation of the storm is potentially decided in other causal movements already established, or even already past. If the storm were destined to subside within the six hours, it would have done so just the same without the prayers; if it was

not destined to cease, the prayers were futile. Prof. Tyndal, as all the world remembers, proposed to subject the justice of this theory to a "physical test," which the Christian writers were more successful in scolding than in refuting. His plan was the following: Let a multitude of poor men, sick to an equal degree with the same diseases, be divided equally into two wards of a hospital, and let them receive, in every respect, the same curative treatment. Let the Christian people pray fervently for those in one ward, and not at all for those in the other; but let not the sufferers on either side know anything of this, lest their imaginations, stimulated by hope or fear, should react favorably or otherwise on their bodily condition. Then, a faithful record of the percentage of recoveries and deaths would reveal, by a physical test, whether prayer efficaciously influenced the result. This, said he, is the way in which physicists, who argue from substantial facts, would proceed to test the validity of a law of nature; and if the Christians are in earnest, they will be glad to subject their opinion to so honest a trial.

All that can be said of this proposal is, that it has a show of plausibility: it might rise to the height of a jest, were not jesting on such a subject too unsavory for any decent mind. The real answer to the proposal is, that it begs the very question which it proposes to investigate. Every man who can think consistently will see that the question, whether prayer is answered, turns on this other: Is there a personal Being exercising a present providence over us? If there is none, of course there is no answer to prayer; if there is, then He may answer prayer, provided the perfections which guide His will prompt Him to do so. Now, will they thus prompt Him? If there is a God in Providence, this is a question about a rational free-agency. For such a question a "physical test" is obviously out of the question; it is mere conjuring. Had Prof. Tyndal been as famil-

iar with his Bible as with his laboratory, he would have perceived this by two criteria. One of these is in the fact that the promises of answer to prayer which Christians read in this book, are professedly separated into two classes. Some of the prayers authorized there seek the spiritual benefits of redemption: others seek allowable and innocent natural good, not essential to redemption. The promise of specific answers given by the Christian's God is confined to the former class of objects. For the latter class of objects we are permitted to pray; but with the express information that there is no pledge whatever of a specific answer, because the divine Omniscience may see that the natural good craved is about to cease to be, on the whole, a good; or the natural evil deprecated is ceasing to be, to this petitioner, a real evil. We are taught to pray with submission, leaving the issue to the general wisdom and mercy of the divine Dispenser. And this is all the extent the Christian Scriptures really give to any expectation of answer which they authorize. Now the point of the explanation is, that the object of petition in this proposed test falls under this latter class: the healing of sickness and prolongation of the life of the body are among those natural goods about which the God we pray to has given no specific promise. If Prof. Tyndal desires to get his many sins pardoned through God's Son, or his darkened mind enlightened to the knowledge of Christ. I am happy to assure him, that the promise is perfectly explicit, and we are authorized to pledge him, with lit eral exactitude, that as soon as he prays in earnest, he will receive. But if he desires the healing of his own or any other mortal body, at a specific time, God has not authorized us to give any pledge; the result must be left to His wisdom and compassion, even as the great Redeemer left His prayer for deliverance: "Nevertheless, not my will, but Thine be done." These are the terms on which we Christians hold our own lives. The

test is, therefore, no test at all, and was suggested in sheer ignorance.

The other criterion is this: that it requires a personal will of the most venerable nature to promise to submit itself to a needless test, upon a demand which can only appear petulant and insolent. Unless the test is guilty of the sophism of begging the very question under investigation, I repeat, it must be assumed that possibly there may be such a venerable, personal will, concerned in answering our prayers. But if there is, it is every way probable, if not certain, that he will see an adequate, rational motive in his own self-respect, for declining to respond to such a test, after he has published his promises on that point. Hence: the failure of the attempted test would leave us entirely in the dark: it would prove nothing, save God's displeasure at our impertinence. It is presumed that, had Prof. Tyndal pledged himself to deliver a certain course of lectures. and had he then been required to make a voluntary response to a course of experiments designed to ascertain whether he was a person who could be trusted to keep his word, they would have proved decided failures. And it may be safely surmised, that were I to argue from his contemptuous silence under those experiments, that he cannot be trusted to keep his word, I should incur his certain resentment. I now dismiss this point with the question: Has the Almighty less right to protect His own self-respect than P. of. Tyn-Sigh

In addressing ourselves to the more serious argument attempted against the possibility of Providential interventions to answer prayer, I call the student's attention to some obvious remarks. First: That argument, if valid, would only apply to the kind of good explained above, as natural, allowable good, of which the Scriptures never say that God is pledged to bestow it upon petitioners certainly. The whole sphere of redemp-

tion is left untouched, including all the blessings of God to the soul, as consisting in His own pardoning acts and communications of grace. These lie outside the difficulties arising out of the supposed rigidity of material laws. Second: It is not necessary, in order to meet the cavil, to enable the physical philosopher actually to detect the secret hand of God, directing a new specific effect to emergence through natural laws, and to show the caviller how it is done. All that is necessarv is, to evince that the act is feasible for omnipotence: that is, to show that, for such power, it is not impossible. The justice of this remark is evident to the modest reason. Every physicist claims credit from the unlearned in the parallel case. For instance, he shows the peasant that a message is actually sent and answered by the magnetic telegraph; he tells him that there is a way to do it, by means of a knowledge giving to a personal will a control over physical laws. He does not pretend to enable the peasant to comprehend that way. But he expects to be believed! Again: God is a spirit; His providential intervention is a spiritual agency. But no action of spirit reveals itself to physical tests or the bodily senses: none can be described in terms of material science. Can the physiologist detect the actual mode in which his own spirit emits a volition to the muscles along the efferent nerves? But he knows that the spirit does it, and that, precisely according to the laws of nervous matter. God is not the soul of the world, and matter is not His body; but the analogy is yet sufficient to reconcile the reasonable spirit to the mystery.

Now it has been well remarked, in reply to the physical objection against prayer, that Nature (whose stable laws are objected) is a system including both minds and matter. Both together make up the complex machine. We have discovered a few of the established methods by which the powers in this vast system inter-

act; we know that many of them remain concealed from us. Spirits and matter can, and do, interact; how much, we do not know. Now it may be that the ties of natural law are such, that the earnest desires which creatures utter to the Ruler of nature in prayer, arelinks in the chains of natural means by which the result is produced. Who can disprove this? Then, if this is not shown impossible, it is not impossible but that the prayer may bring the answer in strict accordance with natural law, yea, by virtue of it.

Again, every analogy known to common sense shows that it is unreasonable to suppose God shut out from intervention with the machinery which is the work of His own hand. Nature is His invention. He conferred its powers out of His own self-existent omnipotence. The wonders of ingenuity and wisdom it discloses "are parts of His ways; but the thunder of His power who can understand?" Now, is it not an absurd representation, that such an Artificer has been baulked by the very success of His own handiwork? That is. He exerted His perfect ingenuity in making a machine, and made it so successfully, that by reason of its very completeness, the machine has shut out its own Maker from intervention with it! He has been so skillful that the work of His skill runs as it pleases, and not as He pleases! It is not so with any other artificer; as human art is perfected, its productions become at once more powerful and more manageable. What more exactly, more rigidly regulated as to the laws of its action, than a locomotive engine? The material is iron, the most inflexible of metals. Its motive power is steam, a blind, imprisoned monster. Its might is irresistible by the direct strength of men. Its track is a pair of iron bars, of inflexible uniformity, equi-distant from each other everywhere to a fraction of an inch. And, to crown all, this machine must run backwards and forwards upon this track by an accurate "timetable," from which no official can depart without the peril of destruction to himself and others. Yet this tremendous machine stops at the cry of a sick child! There is a "Conductor," who knows the mode of regulating its motions consistently with the regular laws of its motion. So, there is a "Conductor" who manages the machinery of nature! Shall God be represented as inferior to His creature?

The objection against the providential answer of prayer is usually urged, as though all special providence were antagonistic to the regular action of second causes, and could only be effectuated through their disturbance. But, as we saw by the illustration of the clock, this is a sheer mistake. All efficient providence is special; the general providence is only through the special. God exercises it not against, but by means of, the invariable uniformity of nature. It was not because the two laws of gravity in the weight and the pendulum were changeable, that the clockmaker was able to modify the running of his clock, but because they are changeless. Had these methods of natural force been variable, then the ability of this intelligent will to adapt them to a varying function, would have been far less; the task would have been far more difficult for him. But because they are invariable, therefore his task was feasible. He had only to arrange for certain changes of the interaction of the two unchanging forces, and the result was a function changing at his will. It is indisputably possible for the great World-Maker to do the same thing, as often as He pleases. We see very clearly, so far as the sphere of our intelligent observation goes, that each power residing in second causes, when released from potentiality into activity under the same conditions, always acts in the same way. But we are also conscious, if we think correctly, that there is always an unexplored mystery attending the mode of that release and arrest. The power comes out of the

dark, into our observation and retires into the dark again. Does any one say, But its release from this potency into activity, and its arrest, are both the work of other powers in other second causes? This may be very true; and it may also be true that an immediate Providence is guiding the one natural power in its modification of the other. He does not intend that man shall expose and delineate the real method of His working. But He gives us abundant signs of His presence and ability.

Thus, as a sound and reverent philosophy begins with primitive and à priori notions, which, though rudimental to all knowledge, are themselves incomplete, so it ends with conclusions which are demonstrated, and yet imperfectly comprehended. "Now I know but in part." Perfect comprehension of truth is the prerogative of the infinite Intelligence; adequate and certain apprehension is ours. The mind imbued with the "Positivist" temper will, indeed, remain obstinately dissatisfied with the result. Such a man will declaim against natural theology and the other moral sciences, as fruitless of all but differences and debates. But the friends of philosophy have their speedy revenge. Let him attempt to reconstruct the moral sciences upon a "positive" method, and they become at least as uncertain as the rest of us unpositive mortals. Thus it was with Comte. As soon as he approaches "sociology," and attempts to treat of mind, morals, human right, and government, the Priest of Humanity is compelled to excommunicate many of His earlier converts from His Church. Somehow "Positivism" itself, when it approaches this subject, is no longer "positive;" it guesses, dogmatizes, dreams, disputes, errs, fully as much as its predecessors. What, now, does this show? Plainly, that the experimental methods of the physical sciences are incapable of an exact and universal application, in this field of inquiry. The objects are immaterial; they are no longer defined, as in physics, by magnitude, figure.

quantity, duration, or velocity. The combinations of causation are too complex. The effects are too rapid and fleeting. The premises are too numerous and undefined for our limited minds to grasp with exactness. If Positivism, with all its acknowledged learning, and mastery of the sciences of matter, with its boasts, and its confidence, has failed to conquer these difficulties in the little way it professes to advance in the science of the human spirit, shall we not continue to fail in part? "What can he do that cometh after the King?"

Let us couple this fact, that the sciences of psychology and morals, with natural theology, have ever been, and are destined to remain, the least exact and "positive" of all the departments of man's knowledge, with this other: that they are immeasurably the most important to his well-being and his hopes. The latter statement commends itself to our experience. It is far more essential to a man's happiness here (not to speak of his hereafter) that he shall have his rights justly and fairly defined than his land accurately surveyed. It is far more interesting to the traveller to know whether the ship-captain to whom he entrusts his life has the moral virtues of fidelity, than the learning of the navigator. It is more important to us to have virtuous friends to cherish our hearts than adroit mechanics to make our shoes. It is more momentous to a dving man to know whether there is an immortality, and how it may be made happy, than to have a skillful physician. now that his skill is vain. We see, then, that human science is least able to help us where our need is most urgent. M. Comte reprehends mankind, because "questions the most radically inaccessible to our capacities, the intimate nature of being, the origin, and the end of all phenomena, were precisely those which the intelligence propounded to itself as of paramount importance, in that primitive condition; all other problems really admitting of solution being almost regarded as unworthy of serious meditation. The reason of this it is

not difficult to discover; for experience alone could give us the measure of our strength." Alas! the reason is far more profound. Man has ever refused to content himself with examining the properties of triangles, prisms, levers, and pulleys, which he could have exactly determined, and has persisted in asking whence his spiritual being came, and whither it is going, what is its proper rational end, and what its laws: not merely because he had not learned the limits of his powers. but because he was, and is, irresistibly impelled to these inquiries by the wants of his soul. His intuitions tell him that these are the things, and not the others, which are of infinite moment to him. It appears, then, that it is unavoidable for man to search most anxiously where he can find least certainty in his own light. His intellectual wants are most tremendous, just in those departments where his power of self-help is least. To what should this result point us? If we obey the spirit of true science, it will manifest to us the great truth that man was never designed by God for mental independence of Him: that man needs, in these transcendent questions, the guidance of the infinite understanding: that while a "positive philosophy" may measure and compare his material possessions, the only "exact science" of the spirit is that revealed to us by the "Father of Spirits." This, the anti-Christian philosopher may be assured, is the inevitable conclusion to which the healthy reason will ever revert, as the needle to the pole, despite all his dogmatism and sophistry. Corrupted religions have always been too strong for false philosophy. What, then, is the hope for it, when the pure light of God's word is poured unobstructed into the mind of the nations? The seventh decade of the nineteenth century, at its beginning witnessed the arrogant advance of the Sensualistic philosophy, as though to new conquests against Christianity. The eighth will not have closed until the ebbing tide of its seeming success will be apparent.

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B.C. 1451.

Joshua appointed the leader of Israel

s Dè. xxxiii, 1, 5 Nu. xiii, 8,

e He. iv. 8. vv. 1—4. J. Saurm, Historical Serms, iii. 1.

v. 2. Dr. G. Lawson, Serms. i.

v. 5. F. E. Tuson, Serm. 68.

"Though the great man rises above the level of common humanity, he is no more to be looked upon as distinct separate from the masses beneath him then the loftiest mountain that bathess its head in heaven can be said to be independent the earth, from whose surface it rises in its sublimity and grandeur: pay not thy praise to lofty things things alone; the plains are everlasting as the hills."-Dr. Ferguson.

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d Dr. Morrison.

his encouragements ov. 6, 7, 7

ev. 6, 7. Tim. Dwight, D.D., Serms. 1. 536. e. 7. Abp. Hutton. A Serm.

v. 8. W. Strong, Serms. 617; Bp.

CHAPTER THE FIRST.

1—5. (1) servant of the Lord, official title of Moses, Dexxiv. 5; comp. man of God.² Joshua, orig. Oshea; obs. prefix Je; and Gk. form of word Jesus.² minister, official attendant, so best acquainted with Mos. principles. (2) this Jordan, wh. was to be E. boundary of their land, so crossing it was taking possession. (3) sole of your foot, fig. used bec. reference is to land, on wh. foot rested. (4) this Lebanon, tho distant, it was visible fr. their position at the time, and formed N. boundary. Euphrates, Ge. ii. 14, xv. 18. Hittites, put for Canaanites generally, as being the dominant tribe. great sea, Mediterranean. (5) stand before thee, effectually to resist you.

The character and death of Moses (v. 2).—We have here—I. The character of Moses: "My servant." Moses was a servant of God by—I. The consecration of his powers; 2. The homage of his mind; 3. The obedience of his life; 4. The philanthropy of his actions. II. The death of Moses. This was—I. A penal event; 2. Sudden; 3. Solitary; 4. Subsequently attended by

extraordinary circumstances.—Mu in Sketches, iv. 179.

The materials of which God can make great men .- That solitary monk, whose attention has been drawn to the volume of eternal truth, and who is so anxiously perusing its long-neglected pages: what is likely to become of him? He will prove one of the noblest spiritual heroes which modern ages have produced; one that will bid defiance to popes and cardinals, and be prepared at the call of duty to march fearlessly onward, even should there be as many devils in the place to which that duty nrged him as there were tiles upon the houses. That profane tinker, who has begun to weep on account of his sins, and earnestly to pray for mercy: what is likely to become of him? God will turn the tinker into a successful preacher, and not only so, but into a matchless dreamer; and by his prison thoughts he is to be the means of helping many a weary pilgrim onward from the city of destruction, over one hill of difficulty and another, even to the shining city above. That cobbler on his stall, with his serious musings, while stitching and hammering away: what is likely to become of him? God is going to make the humble artisan into a Dr. Carey, and appoint him His own instrument for placing in the hands of the teeming myriads of the East the glorious charter of salvation. So with some around us, such as that boy in the Sabbath class, once so thoughtless, but of late so attentive to his teacher: what will become of him? Who can tell? Perhaps, when the Church history of China will be written in after ages, an answer to the question may there be given."

6—9. (6) strong, firm in faith, steadfast in principle, not easily moved by surprising or depressing events. good courage, indic the activity and enterprise needful for his undertaking. Repeated w. 7, 9. Qualities needed by military leader. divide, stc., arrange locations of the tribes. (7) prosper, Heb. act wisely, guided by the law. (8) out.. mouth, tc. he must be constantly thinking and speaking about it. Minute and practical acquaintence with it would sastain his own spirit, and give him